Auditor's Home Page | List of Audit Reports

TABLE OF CONTENTS

PAGE

LIST OF APPENDICES

LIST OF CHARTS AND GRAPHS

LIST OF TABLES

INTRODUCTION

In accordance with the City Auditor's 1993-94 Audit Workplan, we have initiated an audit of the San Jose Police Department's Communications Division staffing and scheduling. We conducted this audit in accordance with generally accepted government auditing standards and limited our work to those areas specified in the Scope and Methodology section of this report.

The City Auditor's Office thanks the Police Department's Communications Division management and staff for their cooperation during the audit.

SCOPE AND METHODOLOGY

The San Jose Police Department (SJPD) Bureau of Technical Services consists of two divisions: the Operations Support Services Division and the Communications Division. This report deals with the Police Dispatch Operations section, which is a major part of the Communications Division (Division). This report does not cover the Fire Dispatch Operations section which is located in the same facility as the Police Dispatch Operations section.

Our audit objectives were

- To review the Division's staffing and scheduling procedures and
- To find ways to make the Division's staffing and scheduling more economical, efficient, and effective.

The major part of our audit involved learning the nature of the Division's staffing and workload; gathering data on the Division's emergency, non-emergency, and report-writing call volume; and constructing computer optimization models for the scheduling of public safety dispatchers (PSD) at the Communications Center. Appendix C describes our methodology for the computer optimization models that we produced for this audit.

Our audit also included interviewing officials and staff of the Division and the Budget Office; observing the work of the PSDs and police data specialists; attending field officer briefings; and participating in a police patrol car ride-along.

The documentation we reviewed included:

- PSD staffing schedules
- Division staffing and workload information
- Division internal management reports
- State of California 911 program standards
- Various Police Department memoranda

We performed telephone surveys of other jurisdictions and an on-site visit of the Oakland Communications Center. Finally, we met with officials from State of California 911 Program and also from Pacific Bell.

We performed only limited testing to determine the accuracy and reliability of information in the various computer reports used. Such testing included observation, walk-through, and comparison of the Division's internal management reports. We met with Division and Pacific Bell officials to review information regarding the accuracy and reliability of the computer-generated information. We did not review the general and specific application controls for the computer systems used in compiling the various computer reports we reviewed.

BACKGROUND

The San Jose Police Department's (SJPD) Bureau of Technical Service oversees the Communications Division (Division), which is responsible for answering emergency calls and dispatching the appropriate service units. The chart on the following page shows the Bureau of Technical Services', including the Division's, dispatch operations.

CITY OF SAN JOSE
Police Department

Function and Organization Chart
Date: January 1995

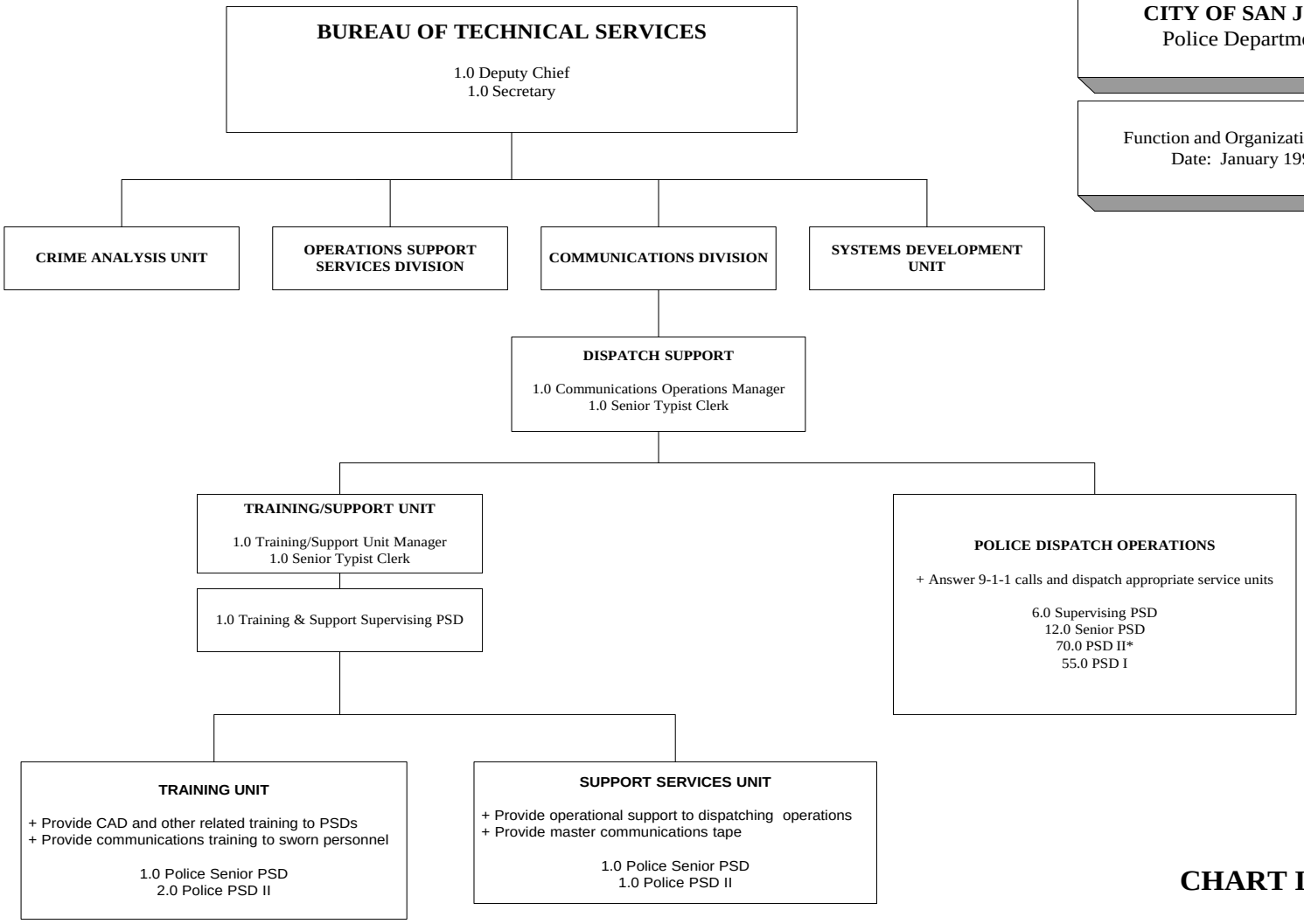


CHART I

* One Police PSD II authorized for Dispatch Operations is assigned to the Training Unit for a total of two Police PSDII's in Training Unit.

The Police Dispatch Operations

The two main tasks involved in the Police Dispatch Operations are call taking and radio dispatching.

Call Taking

Public safety dispatchers (PSDs) Is and IIs answer calls requiring the dispatch of a police officer. The Division has a two-tier system for answering emergency and non-emergency calls. The primary tier call-takers answer 911 calls and 7-digit emergency phone calls.[1] The secondary tier call-takers answer calls that are non-emergency but may require the dispatch of a police officer. If a primary tier call-taker receives a 911 or 7-digit emergency call which the call-taker determines is not an emergency, the primary tier call-taker transfers the call to a secondary tier call-taker in order to be immediately available for another emergency call. Furthermore, if all primary tier call-takers are busy and a 911 or 7-digit emergency call comes in to the Division, the call will roll over to a secondary tier call-taker. If the secondary tier call-taker is busy with a non-emergency call, the secondary tier call-taker will put the non-emergency call on hold and answer the emergency call.

Radio Dispatching

PSD IIs assigned to the radio positions receive requests for police dispatch from the call-takers electronically via the computer-aided dispatch

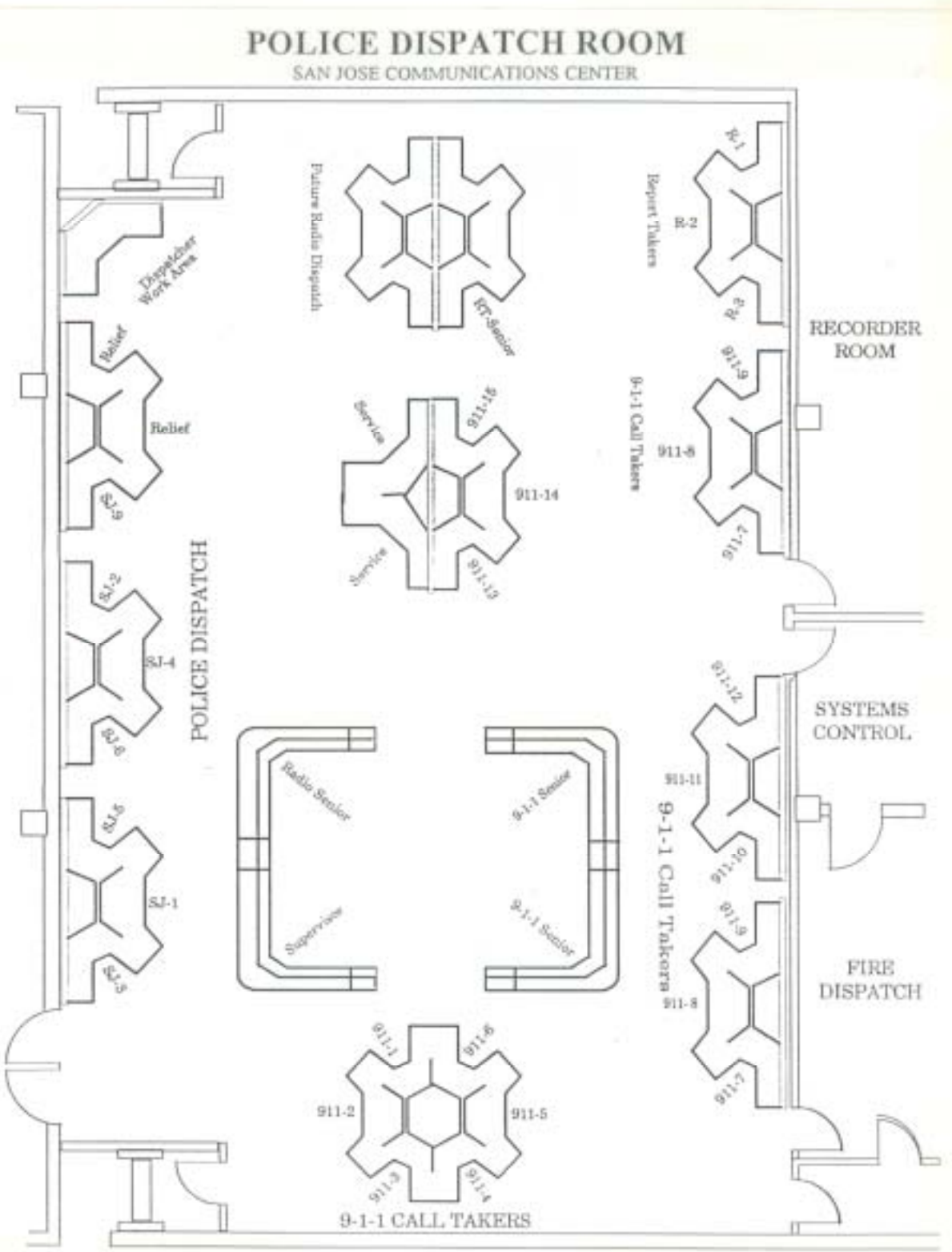
[1] The types of callers that use the 7-digit emergency phone number include: (1) reporting parties who do not want their phone numbers or addresses displayed and documented in the computer system, (2) alarm companies, and (3) out-of-town callers reporting emergencies in San Jose.

(CAD) system. The radio dispatchers are responsible for dispatching and coordinating police field units. The radio dispatchers use voice communication, the CAD, and the Mobile Data Terminal systems to communicate with the police field units and to monitor and update the status of all units.

The San Jose Police Department's Communications Center

The PSDs' workstations are located in the control room of the Communications Center building. The control room can accommodate up to 37 workstations for PSD Is and IIs. Currently, 33 of the 37 workstations are equipped and 4 workstations are not equipped. Prior to 1993, the control room had 29 equipped workstations. These consisted of 7 radio channel workstations, 2 service workstations, 2 relief workstations, and 18 call-taker workstations. During 1993-94, 4 additional workstations were equipped for the report-writing program, which will be transferred from the Operations Support Services Division in May 1995. These 4 report-writing workstations can also be used as call-taker workstations. A floor plan of the control room is shown on the following page.

CHART II


POLICE DISPATCH ROOM
SAN JOSE COMMUNICATIONS CENTER
Dispatcher Work Area
Future Radio Dispatch
KT-Senior
Report Takers
R-1
R-2
R-3
RECORDER ROOM
Relief
Relief
SJ-9
911-9
911-8
911-7
9-1-1 Call Takers
Service
911-15
911-14
Service
911-13
SJ-2
SJ-4
SJ-6
POLICE DISPATCH
911-12
SYSTEMS CONTROL
911-11
SJ-5
SJ-1
SJ-3
Radio Senior
Supervisor
9-1-1 Senior
9-1-1 Senior
9-1-1 Call Takers
911-10
911-9
911-8
911-7
FIRE DISPATCH
911-1
911-6
911-2
911-5
911-3
911-4
9-1-1 CALL TAKERS

The Public Safety Dispatchers' Working Hours Match Those Of The Patrol Officers

Before the city of San Jose (City) took over police dispatching from Santa Clara County in 1990, SJPD management felt that relations between the patrol officers and dispatchers needed improving. When the City assumed the public safety dispatch responsibility, it sought to improve the working relationship of the patrol officers and PSDs. With that in mind, the SJPD implemented a 4-day, 10-hour workweek for the police dispatch staff. This workweek put the PSDs on the same schedule as patrol officers and allowed the PSDs to attend joint briefings with the patrol officers. The main objectives for having the PSDs work the same schedule as patrol officers are that (1) the joint briefings will foster a spirit of camaraderie between the PSDs and the patrol officers and (2) dispatch staff scheduling can be matched with field operations.

The Memorandum Of Agreement Provisions Regarding Working Hours

The Division's staff belongs to the Municipal Employees Federation. The 1993-95 Memorandum of Agreement (MOA) allows the 4-day, 10-hour workweek. The MOA states that

> *Employees required to perform duties as support personnel of uniformed classifications assigned a schedule of four (4) ten (10) hour shifts per work week may also be assigned a schedule of four (4) ten (10) hours shifts per work week.*

In addition, the MOA states that

> *Employees assigned to radio dispatch operations in either the Fire or Police Departments may work alternate work schedules, based upon the needs of the department and the need to provide quality service to the public. Due to the critical nature of the position and the*

restrictions placed upon the employees, any shift of 8 hours or greater will include a 30 minute paid lunch break.

With respect to holiday compensation, the MOA states that

In lieu of the holiday compensation . . ., employees in the Public Safety Dispatcher class series (I, II, Senior and Supervising Public Safety Dispatcher) shall be paid an amount equal to 5.623% of base salary as holiday pay. Employees who are paid such holiday-in-lieu pay may be required to work on holidays, and do not receive any other form of holiday compensation under any other section of this Agreement.

Major Accomplishments

In Appendix B, the SJPD informs us of its major accomplishments regarding the Communications Division. According to the Chief of Police, its major accomplishments are

- In October of 1994, the Police and Fire chiefs reorganized the Communications Division by transferring the fire communications function back to the Fire Department;
- Since the Communications Center's inception, the dispatcher attrition rate has decreased each year to a low of 3.4 percent for 1993-94. This is the lowest rate in the state of California for large communications facilities;
- For 1993-94, only 21 sustained 911 service complaints were received while 1.4 million telephone calls were processed in the same period;
- A rigorous examination process has proved to be a major contributing factor to a low attrition rate resulting in considerable savings for the City. Additionally, dispatchers have actively participated in community policing projects. The Communications Center has received national and local positive media coverage highlighting the training and professionalism of the staff as well as compliments for the Disaster Hot Line used during the recent floods; and

- In May 1995, the Communications Center will take over the function of TRAC from the Information Center.

FINDING I

THE SAN JOSE POLICE DEPARTMENT CAN SAVE AS MUCH AS $860,000 PER YEAR IN PERSONNEL COSTS AND IMPROVE ITS SERVICE TO THE PUBLIC BY OPTIMIZING ITS DEPLOYMENT OF DISPATCHERS IN THE CITY'S COMMUNICATIONS CENTER

The San Jose Police Department's (SJPD) Bureau of Technical Services, Communications Division (Division), employs 115 public safety dispatchers (PSDs) to answer 911 calls and non-emergency calls at the city of San Jose's Communications Center (Center) to provide coverage 24 hours a day 365 days a year. During the course of our audit,

- The Division changed to off-hook answering. As a result, average 911 call answering improved from 11 seconds in June 1994 to 3 seconds in February 1995. In addition, call answering improved from 33 percent of 911 calls answered within 5 seconds in June 1994 to 83 percent of 911 calls answered within 5 seconds in February 1995.

- The Division implemented procedural changes to lower the maximum 911 call-answering time. As a result, the number of 911 calls that took over 60 seconds to answer decreased from 771 calls in August 1994 to approximately 4 calls in February 1995. In addition, the percentage of 911 calls that were lost because callers hung up before their calls were answered decreased from 6 percent in August 1994 to 2 percent in February 1995.

These improvements notwithstanding, our review also revealed the following regarding the Center's staffing and resultant efficiency and effectiveness:

- The Division staffs the Center with a 5-shift pattern with no shift starting later than 9 p.m. and allows 45 minutes for PSD briefings and

- The average PSD is on short-term or long-term leave or training 22.6 percent of the time.

In our opinion, the Center's current staffing pattern is inherently inefficient and costly and has caused the following consequences:

- The Center's staffing pattern does not correspond to call volume. As a result, significant overstaffing occurs during some periods of the day while understaffing occurs during other periods of the day;

- The Center frequently falls below its own minimum staffing level in spite of PSDs earning $300,000 per year in paid overtime or compensatory time off;

- The Division did not meet one of its four emergency call-answering objectives in 1991-92, 1992-93, or 1993-94;

- The Division's revised emergency call-answering objectives since 1993-94 are slower than the objectives the state of California recommends;

- During June and August 1994, 15 percent and 21 percent, respectively, of those emergency callers whom PSDs deemed not to be in an emergency situation hung up after being put on hold. Those callers who hung up did so after PSDs put them on hold an average of 2 minutes 10 seconds in June 1994 and 2 minutes 31 seconds in August 1994. Further, there were 7 days during June 1994, 11 days during August 1994, 8 days during September 1994, and 8 days in February 1995 that an emergency caller whom a PSD deemed not to be in an emergency situation was put on hold for at least 15 minutes with one caller being put on hold for at least 34 minutes; and

- During February 1995, 24 percent of those emergency callers whom PSDs deemed not to be in an emergency situation hung up after being put on hold. This is twice the percentage of calls lost when compared to February 1994.

In May 1995, the Division will assume responsibility for non-emergency report-writing calls that the SJPD's Operations Support Services Division currently handles. The Division has proposed to the City Administration that it can assume this additional responsibility by adding 9 PSDs, for a total of 124 PSDs. However, our review indicates that unless the Division either adds 12 more PSDs or deploys its existing PSDs more efficiently the conditions described for emergency callers whom PSDs deem not to be in an emergency situation will be perpetuated after May 1995 and the Division will continue to function below its own minimum staffing level. Finally, the City Auditor's Office used a computer model to optimize the scheduling of PSDs in the Center. The results of our optimization were that the Division can (1) eliminate 10 PSD positions while at the same time significantly improve its ability to function at or above its minimum staffing level, (2) avoid periods of overstaffing, and (3) save the City $860,000 per year in regular personnel, overtime, and compensatory time costs. Accordingly, we recommend that the SJPD and the City Administration use the information in this report to develop, and forward to the City Council for concurrence, a staffing proposal for the Center that is both responsive to the public's emergency calling needs and the least costly to the City.

The City Of San Jose's Communications Center

The SJPD's Bureau of Technical Services, Communications Division, employs 115 PSDs to answer 911 calls and non-emergency calls at the Communications Center. The 115 PSDs include 14 authorized PSD positions that were added in August 1992. Of these additional 14 PSD positions 6 are primarily

assigned to the call-back function.[2] Thus, 109 PSDs are available for call-answering (call-takers) and dispatch (radio channel operators) duties.

During The Course Of Our Audit,
The Division Changed To Off-Hook Answering.
As A Result, Average 911 Call Answering Improved
From 11 Seconds In June 1994 To 3 Seconds In February 1995.
In Addition, Call Answering Improved From 33 Percent
Of 911 Calls Answered Within 5 Seconds In June 1994
To 83 Percent Of 911 Calls Answered Within 5 Seconds In February 1995.

In July 1994, in response to a City Auditor recommendation, the SJPD's Communications Division changed to an off-hook system to answer emergency calls. By using an off-hook system to answer emergency calls, the City Auditor had estimated the Center could improve its emergency call response times by 4 to 5 seconds without having to increase staffing.

The Communications Center Has Improved Its Emergency Call-Answering Response Time By Using An Off-Hook System

Prior to July 1994, the Division used an on-hook answering system. With an on-hook answering system the call-taker must press a button to answer a call. In an off-hook answering system, a zip tone announces the call and the call-taker can immediately speak with the caller without having to press a button. During the first trimester of 1993-94, the Division, using an on-hook answering system, had an average answering time of 9.2 seconds. In contrast, the city of San Diego, California, using an off-hook answering system, had an average answering time of 4 seconds. The city of Oakland, California, also using an off-hook system, had an

[2] Call-backs must be made when persons call 911 and hang up before the call is answered. Some of these call hang-ups are crime or domestic violence-related.

answering time of 4 to 7 seconds. Based on this information, the City Auditor's Office recommended to Division management that the Division change to the off-hook system.

In July 1994, the Division management changed the Center to an off-hook system. We compared 911 telephone-answering statistics from the Division's System Status Reports for February 1994, June 1994, September 1994, November 1994, and February 1995. Table 1 summarizes the Center's call-answering performance during February 1994 and June 1994, when the Center was still using an on-hook answering system, to August 1994, November 1994, and February 1995, after the Center had switched to an off-hook answering system.

TABLE 1

COMPARISON OF THE COMMUNICATIONS CENTER'S 911 CALL ANSWERING DURING FEBRUARY 1994 AND JUNE 1994 USING AN ON-HOOK ANSWERING SYSTEM TO AUGUST 1994, NOVEMBER 1994, AND FEBRUARY 1995 USING AN OFF-HOOK ANSWERING SYSTEM

	On-Hook Answering System		Off-Hook Answering System		
Month	**February 1994**	**June 1994**	**August 1994**	**November 1994**	**February 1995**
Average Call-Answering Time In Seconds	10	11	10	5	3
Maximum Call-Answering Time In Seconds	139	117	144	109	75
Percentage Of 911 Calls Answered Within 5 Seconds	38	33	69	82	83
Percentage Of 911 Calls Answered Within 10 Seconds	69	62	72	85	87
Percentage Of 911 Calls Answered Within 15 Seconds	82	76	75	88	90
Number Of 911 Calls Offered	24,835	31,638	33,254	24,549	25,372

Table 1 shows the dramatic improvement in call answering the Center has attained since changing from on-hook to off-hook answering.

The Division Implemented Procedural Changes To Lower The Maximum 911 Call-Answering Time. As A Result, The Number Of 911 Calls That Took Over 60 Seconds To Answer Decreased From 771 Calls In August 1994 To Approximately 4 Calls In February 1995. In Addition, The Percentage Of 911 Calls That Were Lost Because Callers Hung Up Before Their Calls Were Answered Decreased From 6 Percent In August 1994 To 2 Percent In February 1995.

In November 1994, as part of our audit, we presented to Division management our findings regarding the number of calls that the Center took more than 60 seconds to answer. Specifically, we informed Division management that for the months of June, August, and September 1994 the Center took over 60 seconds to answer 2,468 emergency (911 and 7-digit) calls. Our calculations were based on the Division's June, August, and September 1994 monthly computer-generated daily information Delayed Call Spectrum reports and are summarized in Table 2.

TABLE 2

SUMMARY OF EMERGENCY CALLS ANSWERED IN OVER 60 SECONDS DURING JUNE, AUGUST, AND SEPTEMBER 1994

Call Descriptions	June 1994	August 1994	September 1994	Totals
Total Emergency Calls Offered[3]	38,089	39,841	37,259	115,189
Total Emergency Calls Handled[4]	29,645	30,476	28,877	88,998
Number Of 911 Calls Answered In Over 60 Seconds	260	771	482	1,513
Number of 7-Digit Emergency Calls Answered In Over 60 Seconds	302	360	293	955
Total Emergency Calls Answered In Over 60 Seconds	562	1,131	775	2,468

[3] **Calls Offered** comprise calls handled, transferred, and lost.
[4] **Calls Handled** are answered calls that are not transferred.

The Division's computer-generated System Status Reports also document the maximum daily delay in answering calls. The daily maximum delay for 911 emergency calls exceeded 100 seconds during 6, 21, and 12 days in the months of June, August, and September 1994, respectively. The maximum daily delay for 7-digit emergency calls exceeded 100 seconds during 16, 24, and 25 days during the months of June, August, and September 1994, respectively.

In response to the above information, Division management implemented procedural changes to lower both the number of calls answered in over 60 seconds and the maximum delays. Specifically, the timing of an audible alarm, which indicates a 911 call waiting to be answered, was changed from approximately 45 seconds to exactly 20 seconds. Other procedural changes included improved call-taker supervision, relief coordination for lunch and breaks, and reporting of calls delayed over 60 seconds to Division management. As a result, our review of the Division's February 1995 System Status Report showed that the Division has significantly improved its emergency call answering as is shown in Table 3.

TABLE 3

SUMMARY OF EMERGENCY CALLS ANSWERED
IN OVER 60 SECONDS DURING FEBRUARY 1995

Call Description	February 1995
Total Emergency Calls Offered	31,104
Total Emergency Calls Handled	24,401
Number of 911 Calls Answered In Over 60 Seconds	4
Number of 7-Digit Emergency calls Answered In Over 60 Seconds	61
Total Emergency Calls Answered In Over 60 Seconds	65

During February 1995 the Division answered no emergency calls in over 100 seconds. Although February emergency call volume is usually about 19 percent less than an average summer month, the number of February 1995 emergency calls answered in over 60 seconds is 92 percent less than June, August, and September 1994.

911 Calls Lost Because Callers Hung Up Before Their Calls Were Answered Decreased From 6 Percent In August 1994 To 2 Percent In February 1995

We reviewed the computer-generated 911 and 7-digit emergency line Lost Call Reports for June and August 1994. These reports show the length of time elapsed before a caller hangs up. The number of emergency calls lost for June and August 1994 averaged approximately 6 percent of calls offered. This amount represents approximately 4,544 emergency callers in June and August 1994 who hung up before a call-taker answered their calls. Approximately 57 percent and 63 percent of those 911 callers whose calls were lost in June and August, respectively, waited over 15 seconds before they hung up. The average delay before a 911 caller hung up was 19 and 23 seconds in June and August 1994, respectively. In addition, there were three days in August 1994 when 911 callers waited from 3-1/2 minutes to almost 7 minutes before hanging up. A PSD "calls back" those callers who call 911 and hang up before their calls are answered. If the caller who hung up does not answer when a PSD "calls back," the Center dispatches a police officer to the location from which the call was made.

It appears that as a consequence of the procedural changes noted above, both the 911 maximum answering time and the number of 911 calls lost have decreased. In February 1995, only 2 percent of 911 callers hung up prior to their calls being

answered. This percentage compares favorably to summer 1994 as well as to February 1994 when 6 percent of callers hung up before their calls were answered.

These improvements notwithstanding, our review also revealed the following regarding the Center's staffing and resultant efficiency and effectiveness.

The Division Staffs The Center With A 5-Shift Pattern With No Shift Starting Later Than 9 P.M. And Allows 45 Minutes For PSD Briefings

5-Shift Staffing Pattern With Restricted Starting Times

The Division uses 115 PSDs to staff the Center on a 5-shift, 4-day-a-week, 10-hour-a-day basis to provide 24-hour-a-day coverage 365 days a year. The starting times for the Center's current 5-shift staffing pattern are as follows:

6:15 a.m.
8:30 a.m.
3:00 p.m.
6:00 p.m.
9:00 p.m.

As is shown above, the Center restricts starting times so that no shift starts after 9 p.m. According to Division officials, the decision to restrict starting times to no later than 9 p.m. was based upon Division concerns for PSD safety and morale and to prevent fatigue. Conversely, optimizing PSD staffing to correspond with Center call volume was not a determinant factor when the Division restricted shift starting times to no later than 9 p.m.

45-Minute PSD Briefings

Since 1990, PSDs have attended joint briefings at the beginning of their shifts with SJPD patrol officers. Their briefings are held in the briefing room which is located one floor below the Center. Bureau of Field Operations (BFO) briefings begin at 6:30 a.m., 3 p.m., and 9 p.m., and last from 10 to 40 minutes. After BFO briefings, PSDs may hold a 15-minute briefing with the supervising PSD. Senior PSDs brief PSDs for the 8:30 a.m. and 6 p.m. overlay shifts. As such, a PSD can spend 45 minutes, or more, of his or her 10-hour workday in briefings. Oftentimes, these briefings occur during high call volume times of the day or when the number of PSDs actually available to answer calls is relatively low.

The Average PSD Is On Short-Term Or Long-Term Training Or Leave Approximately 22.6 Percent Of The Time.

PSDs are unavailable to perform their call-handling or dispatch tasks when they are (1) absent, (2) on short-term annual training, (3) on long-term leaves, or (4) in the entry-level or promotional training programs.

The Center experiences staffing shortages when PSDs are on extended absences such as medical (maternity, family, or worker compensation) or other types of paid or unpaid leave. Staffing shortages also occur due to vacancies or when new or promoted PSDs are in the training program. According to Division management, new PSDs are in training from six months to a year and promoted PSDs are in training from four to eight months. In September 1994, 19 percent of the authorized staff was on extended absences and unavailable to work a regular shift because: 7 PSDs were on leave, 1 PSD was on special administrative

assignment, 12 PSDs were in the training program, and 2 positions were vacant. In October 1994, 21.7 percent of the authorized staff was on extended absences and unavailable to work a regular shift. Furthermore, in October 1994, 4 PSDs who were on extended absences and not available to work a regular shift during the prior month were either transferred, resigned, or terminated.

The City Auditor's Office and the City Manager's Budget Office have jointly agreed that based upon historical trends during 1993 and 1994 that the average PSD is on short- or long-term leave 22.6 percent of the time as shown in Table 4.

TABLE 4

SUMMARY OF AVERAGE PSD SHORT- AND LONG-TERM ABSENCES

Absence Type	Hours Per Year	Percentage of Available Annual Hours
Training	40	1.9
Vacation	100	4.8
Sick Leave	80	3.8
Comp Time	60	2.9
Entry or Promotional Training	110	5.3
Unpaid Leave	80	3.8
Total	470	22.6*

*Total does not foot because of rounding.

As is shown above, PSDs are not available to perform call-handling or dispatch tasks for 22.6 percent of the available 2,080 annual hours.

The Center's Staffing Pattern Is Inherently Inefficient And Costly

In our opinion, the Center's current staffing pattern is inherently inefficient and costly. We arrived at our conclusion by calculating the Center's hourly call

volume-driven staffing demand and comparing that staffing demand to the Center's actual staffing pattern.

The Center's Staffing Pattern Does Not Correspond To Call Volume-Driven Staffing Demand. As a Result, Significant Overstaffing Occurs During Some Periods Of The Day While Understaffing Occurs During Other Periods Of The Day

Call Volume-Driven Staffing Demand

In order to compare the Center's actual PSD staffing pattern to the call volume-driven staffing demand, we had to first determine call volume by the day of the week and time of day. In order to do this, we first documented the historical call volume workload for emergency and non-emergency calls described in Appendix C. After we documented emergency and non-emergency call volume we needed to forecast the number of PSDs required on an hourly basis to handle the call-taking, radio, service, and relief workload. We refer to the number of PSDs needed on an hourly basis as the call volume-driven staffing demand. We considered historical call-handling time and information from Division management and from another jurisdiction in order to estimate the call volume-driven staffing demand.

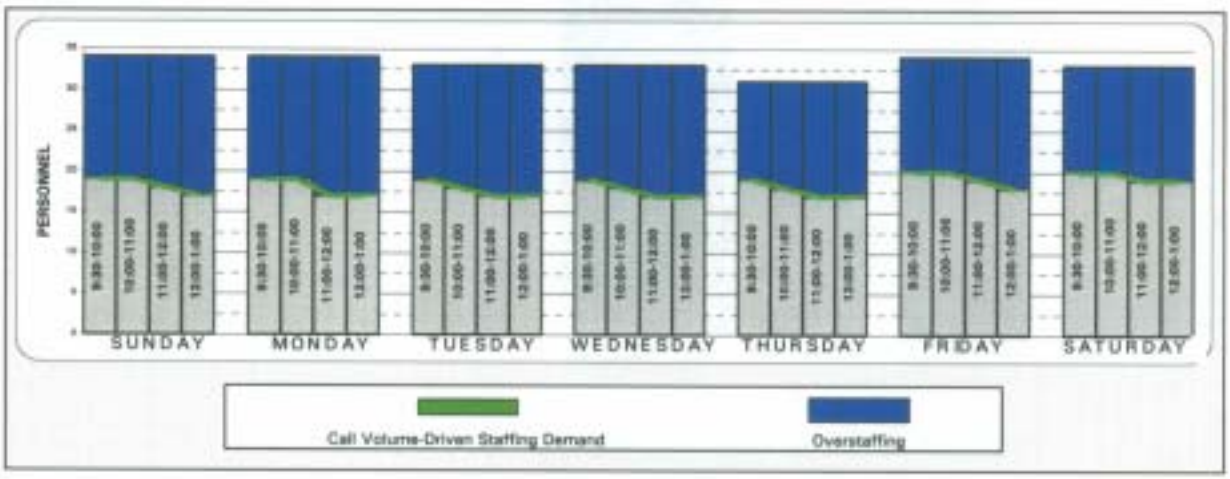
The Center's Staffing Pattern Does Not Correspond To Call Volume-Driven Staffing Demand. As A Result, Significant Overstaffing Occurs During Some Periods Of The Day While Understaffing Occurs During Other Periods Of The Day

Our review of scheduled staffing as of September 1994 (93 PSDs) at the Center revealed the current 5-shift pattern results in significant overstaffing during certain periods of each day when compared to workload demand. The scheduled staffing does not include all authorized positions because some PSDs are on long-term leave or training as discussed in the previous section of this report. Some of the staffing overlaps are intentional because the Division wants additional staff at

peak times. At other times, the Division uses staffing overlaps to allow dispatchers to attend briefings at the beginning of their shifts. However, some overlap is not needed and, therefore, could be eliminated. The overstaffing is the difference between the number of PSDs required to handle the call-taking, radio, service, and relief workload and the staff actually on duty. For example, Graph 1 shows that on Sundays there is an excess of more than 15 dispatchers at various times between 9:30 p.m. and 1 a.m.

GRAPH 1*

DAILY OVERSTAFFING OCCURRING FROM 9:30 P.M. TO 1 A.M.



* Based on 93 available PSDs.

Since December 1993, the Division has utilized part of the overlap staff for telephone report writing from 9:30 p.m. to 1 a.m. Telephone report writing involves answering calls and documenting what the citizen has called to report. Telephone report writing does not require the Center to dispatch a patrol officer.

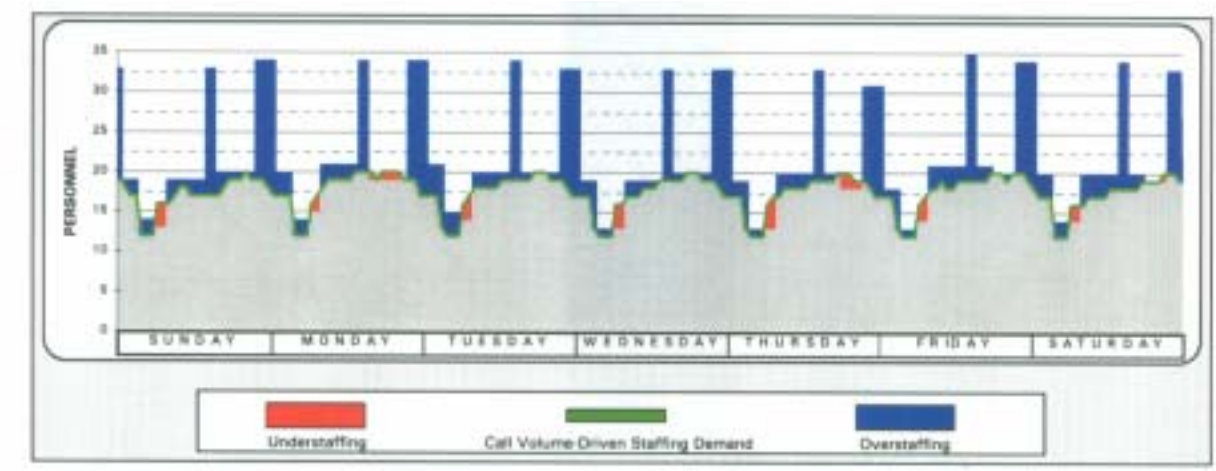
The Current 5-Shift Pattern

We compared the scheduled staffing levels in September 1994 to the Division's call volume-driven staffing demand. We found that, absent overtime, the Division cannot meet the call volume-driven staffing demand we calculated.[5]

Graph 2 compares September 1994's scheduled 5-shift staffing pattern to our calculation of call volume-driven staffing demand.

GRAPH 2

SEPTEMBER 1994 SCHEDULED 5-SHIFT STAFFING PATTERN COMPARED TO CALL VOLUME-DRIVEN STAFFING DEMAND*



* Graph 2 does not reflect telephone report-writing workload even though the Division does utilize some of its 9:30 p.m. to 1 a.m. overlap staff to handle telephone report writing.

[5] The scheduled staffing shown in Graph 2 is the staff scheduled during the semi-annual bidding process and excludes those PSDs on long-term leave and long-term training. Furthermore, we excluded those PSDs who bid during the shift-bidding process because they are expected to return prior to the next shift bid but who continue to be on long-term leave. Graph 2 shows 93 scheduled PSD Is and IIs and does not reflect short-term absences.

Graph 2 shows that in addition to significant periods of overstaffing, there were eleven times during the week when the number of PSDs scheduled to be on duty was less than the call volume-driven staffing demand we calculated.

The Center Frequently Falls Below Its Own Minimum Staffing Level In Spite Of PSDs Earning $300,000 Per Year In Paid Overtime Or Compensatory Time Off

The Division sets minimum hourly staffing levels for PSD Is and IIs. These levels are currently set as shown in Table 5.

TABLE 5

.

DIVISION'S HOURLY MINIMUM STAFFING REQUIREMENT

Hour	Minimum Staffing		Hour	Minimum Staffing
Midnight	21		Noon	19
1:00 AM	16		1:00 PM	19
2:00 AM	16		2:00 PM	19
3:00 AM	16		3:00 PM	21
4:00 AM	12		4:00 PM	21
5:00 AM	12		5:00 PM	21
6:00 AM	12		6:00 PM	21
7:00 AM	15		7:00 PM	21
8:00 AM	15		8:00 PM	21
9:00 AM	19		9:00 PM	21
10:00 AM	19		10:00 PM	21
11:00 AM	19		11:00 PM	21

Our review revealed that the Center is frequently staffed below its own minimum staffing requirements. We judgmentally selected four weeks of the Division's shift deployment reports. The shift deployment reports show actual staff by shift and include absence and overtime information. We reviewed shift deployment reports showing actual staffing for the weeks ending May 22, 1994; June 10, 1994; October 8, 1994; and December 8, 1994; and the day of September 11, 1994. Our analysis showed that for every day we reviewed, staffing, including overtime staff, was below the Center's minimum required staffing during at least two hours of each day. Table 6 summarizes the hours below minimum staffing on each day reviewed.

TABLE 6

NUMBER OF HOURS THAT THE COMMUNICATIONS CENTER WAS BELOW MINIMUM STAFFING DURING THE WEEKS ENDING MAY 22, 1994; JUNE 10, 1994; OCTOBER 8, 1994; AND DECEMBER 8, 1994

Number Of Hours Below Minimum For The Week Ending	Days of the Week							
	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Total Hours Below Minimum
May 22, 1994	6	8	3	8	6	5	6	42
June 10, 1994	4	2	6	9	8	3	9	41
October 8, 1994	9	5	7	3	8	3	12	47
December 8, 1994	11	8	6	8	8	8	12	61

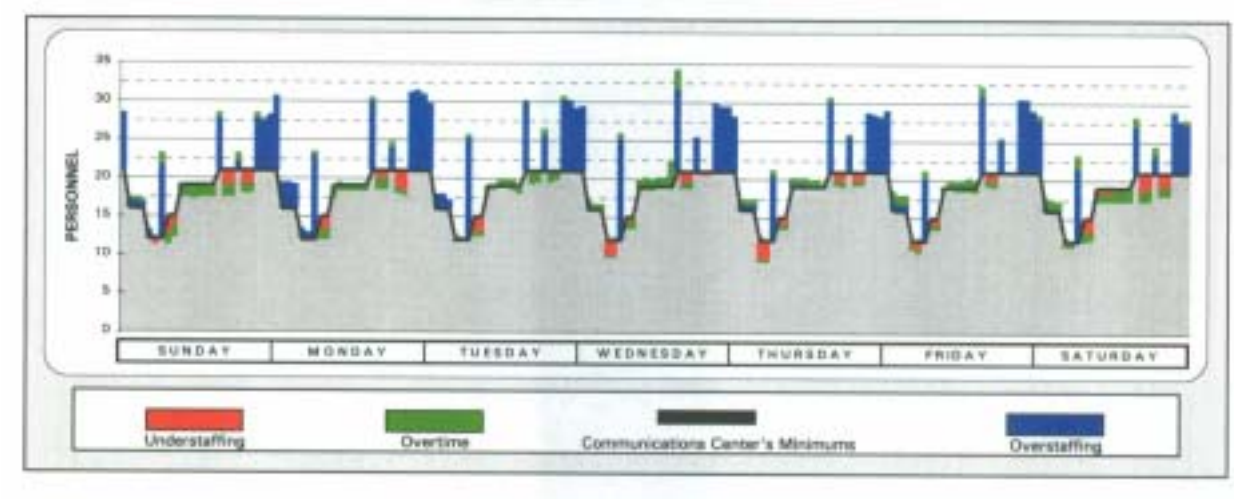
Also, on September 11, 1994, five hours were staffed below minimum staffing levels.

Graph 3 compares the Center's average staffing for the four weeks shown in Table 6 to the Center's minimum staffing levels. The number of staff below

minimum staffing ranged from one to 7 PSDs and is represented in red on the graph. Overtime is represented in green.

GRAPH 3

COMPARISON OF MINIMUM STAFFING REQUIREMENT TO AVERAGE ACTUAL STAFFING FOR THE WEEKS ENDING MAY 22, 1994; JUNE 10, 1994; OCTOBER 8, 1994; AND DECEMBER 8, 1994



Thus, despite periods of overstaffing and the use of overtime and compensatory time, the Center frequently falls below its own minimum staffing requirement.

Appendix D shows the data graphed by individual weeks. These graphs show a pattern of the times of the day when actual staffing falls below minimum staffing. These times are from 7 a.m. to 9 a.m., from 4 p.m. to 6 p.m., and from 7 p.m. to 9 p.m.

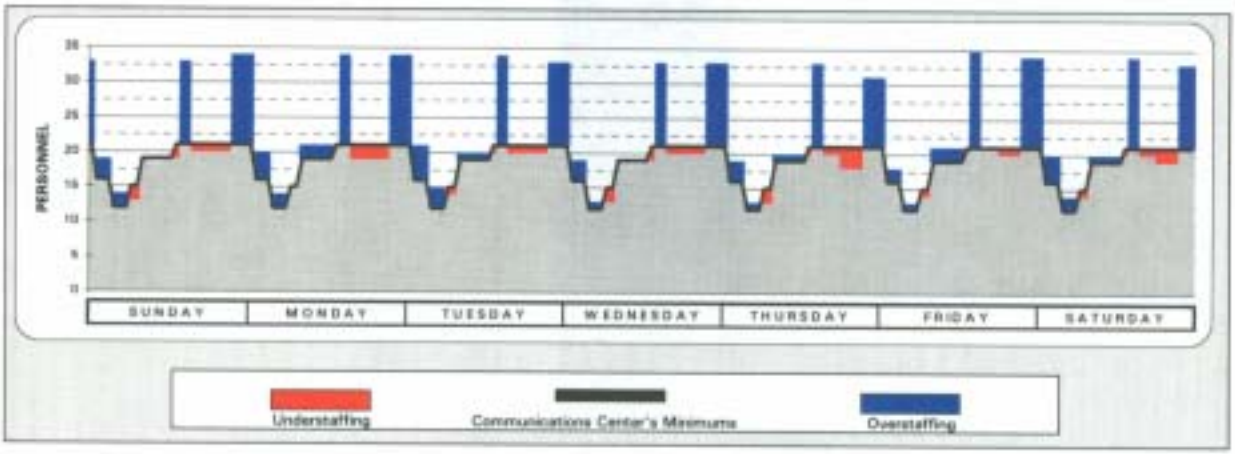
The Current 5-Shift Pattern

We compared the Center's scheduled staffing levels in September 1994 to the Center's minimum staffing requirement. We found that, absent overtime, the Center cannot meet its own minimum staffing requirement.[6]

Graph 4 compares September 1994's scheduled 5-shift pattern to the Center's minimum staffing requirement.[7]

GRAPH 4

SEPTEMBER 1994 SCHEDULED 5-SHIFT STAFFING PATTERN
COMPARED TO CENTER'S HOURLY MINIMUM STAFFING REQUIREMENT



[6] The scheduled staffing shown in Graph 4 is the staff scheduled during the semi-annual bidding process and excludes those PSDs on long-term leave and long-term training. Furthermore, we excluded those PSDs who bid during the shift-bidding process because they are expected to return prior to the next shift bid but who continue to be on long-term leave. Graph 4 shows 93 scheduled PSD Is and IIs and does not reflect short-term absences.

[7] We also show the hourly number of PSDs compared to the minimum requirement in Appendix E.

Graph 4 shows that in addition to significant periods of overstaffing there were eighteen times during an average week in September 1994 when the number of PSDs scheduled to be on duty was less than the Center's own minimum staffing requirement.

Increase In Overtime Costs

During calendar year 1994, the Center experienced an increase in overtime and compensatory time costs. Table 7 compares the overtime and compensatory time earned for PSD Is and IIs for calendar years 1993 and 1994 and shows an 88 percent increase in estimated overtime and compensatory time costs.

TABLE 7

CALENDAR YEARS 1993 AND 1994 OVERTIME AND COMPENSATORY TIME COSTS

	12 Months Ending December 1993	12 Months Ending December 1994	Percentage Increase From 1993 To 1994
Overtime hours	1,721	3,945	129
Overtime paid (at time and a half)	$59,161	$130,102	120
Compensatory time (hours shown are extended at time and a half)	4,937	8,431	71
Estimated compensatory time cost	$108,614	$185,482	71
Total estimated overtime and compensatory time costs	$167,775	$315,584	88

As shown in Table 7, PSDs earned more than $300,000 in paid overtime and compensatory time in 1994. In spite of this significant increase over 1993's paid overtime and compensatory time, the Center was frequently unable to meet its own minimum staffing requirement.

The Division Did Not Meet One Of Its Four Emergency Call-Answering Objectives In 1991-92, 1992-93, Or 1993-94

The performance objectives or the service level benchmarks for the Division for 1993-94 include:

1. To answer 95 percent of the 911 calls within 15 seconds;
2. To maintain an overall average answer time of 12 seconds for 911 calls;
3. To maintain an average call-processing time of 1.5 minutes for Priority 1 calls for service;[8] and
4. To dispatch 90 percent of Priority 1 calls within 90 seconds of receipt of the call by the dispatcher.

Prior to 1993-94, the Division's first two objectives shown above were to

1. Answer 90 percent of 911 calls within 10 seconds and
2. Answer 911 calls within an average of 15 seconds.

Our review revealed that the Division has not met one of its four emergency call-answering objectives as shown in Table 8.

[8] A Priority 1 call is a life-endangering situation or major felony and requires immediate dispatch.

TABLE 8

EMERGENCY CALL-ANSWERING OBJECTIVES 1991-92, 1992-93, AND 1993-94

	Results		
Emergency Call-Answering Objectives	**1991-92**	**1992-93**	**1993-94**
1991-92 Through 1992-93			
• Answer 90% of 911 calls within 10 seconds	74%	68%	
• Maintain an overall average answering time of 15 seconds for 911 calls	10 seconds	10.2 seconds	
1993-94			
• Answer 95% of 911 calls within 15 seconds			84%
• Maintain an overall average answering time of 12 seconds for 911 calls			10.2 seconds
• Maintain an average call-processing time of 1.5 minutes for Priority 1 calls for service			1.37 minutes
• Dispatch 90% of Priority 1 calls within 90 seconds of receipt of the call by the dispatcher.[9]	87.1%	88.56%	88%

As is shown above, the Division did not meet its first call-answering objective in 1991-92, 1992-93 (answer 90 percent of calls within 10 seconds), or 1993-94 (answer 95 percent calls within 15 seconds).

[9] The Division notes that this objective was not met for two reasons: (1) The workload of the PSDs at peak activity times is such that calls cannot be dispatched as quickly and (2) the lack of available field resources to take the calls due to police officer staffing shortages. An audit of this objective was not within the scope of this audit.

The Division's Revised Emergency Call-Answering Objectives Since 1993-94 Are Slower Than The Objectives The State Of California Recommends

The Division's current emergency call-answering objectives are slower than those the state of California recommends. As mentioned above, the Division's revised 1993-94 objectives were to

1. Answer 95 percent of the calls within 15 seconds and
2. Answer 911 calls within an average of 12 seconds.

In contrast, the state of California's 911 non-mandatory standard states that *"During the busiest hour of any shift, ten seconds should be targeted as the maximum amount of time incoming 911 calls are to be answered."*

During June And August 1994, 15 Percent And 21 Percent, Respectively, Of Those Emergency Callers Whom PSDs Deemed Not To Be In An Emergency Situation Hung Up After Being Put On Hold

When a primary tier call-taker determines that a 911 or 7-digit emergency call is a non-emergency situation, the primary tier call-taker transfers the call to a secondary tier dispatcher.[10] These transferred calls may require a police dispatch. Some of these transferred calls are lost when the caller hangs up after being put on hold. In June and August 1994, an average of 15 percent and 21 percent, respectively, of these transferred dispatch calls were lost. Those callers who hung up did so after PSDs put them on hold an average of 2 minutes 10 seconds in June 1994 and 2 minutes 31 seconds in August 1994. Further, there were 7 days during June 1994, 11 days during August 1994, and 8 days during September 1994 that

[10] See page 6 for explanation of primary and secondary tier call-takers.

an emergency caller whom a PSD deemed in a non-emergency dispatch situation was put on hold for at least 15 minutes. Further, on September 11, 1994, one caller was put on hold for at least 34 minutes. It should be noted that this call occurred when staffing was below the Division's minimum (see section on "**The Center Frequently Falls Below Its Own Minimum Staffing Level In Spite Of PSDs Earning $300,000 Per Year In Paid Overtime Or Compensatory Time Off**" on page 27). Finally, our review of the February 1995 computer-generated management reports shows that there were 8 days in February 1995 that a caller deemed to be in a non-emergency situation was put on hold for at least 15 minutes.

During February 1995, 24 Percent Of Those Emergency Callers Whom PSDs Deemed Not To Be In An Emergency Situation Hung Up After Being Put On Hold. This Is Twice The Percentage Of Calls Lost When Compared To February 1994

We compared information regarding calls deemed not to be in an emergency situation and transferred to a secondary tier call-taker during February 1994 with February 1995. Table 9 summarizes the emergency calls transferred and lost volume.

TABLE 9

SUMMARY OF EMERGENCY CALLS DEEMED TO BE NON-EMERGENCY, TRANSFERRED, AND LOST DURING FEBRUARY 1994 AND FEBRUARY 1995

Call Description	Month: February 1994	Month: February 1995	Change
Total 911 and 7-digit emergency calls	30,174	31,104	3%
Number of emergency calls deemed not to be emergencies and transferred to secondary tier call taker	5,129	6,516	27%
Number of calls deemed not to be emergencies and transferred and for which caller hung up.	626	1,533	145%
Calls deemed not to be emergencies and transferred and for which caller hung up.	12%	24%	100%

Based upon our review of the Division's computer-generated reports, it appears that during the course of our audit the Center's emergency call-handling performance improved significantly. However, during the same period, the Center's handling of callers deemed not to be in an emergency situation, but for whom a police dispatch may be required, not only did not improve but appears to have deteriorated.

In May 1995, The Division Will Assume Responsibility For Non-Emergency Report-Writing Calls

Telephone Report Writing

Telephone report writing involves answering citizen calls and documenting the information citizens provide when they report a crime to the SJPD. Currently,

Information Center[11] police officers and police data specialists located at the Police Administration Building answer citizen calls and subsequently manually write the citizen report. According to the SJPD, the Information Center handled approximately 35 percent of the total crime reports the entire department took during the last three years. This is an average of 3,486 telephone reports each month.

According to the SJPD, in recent years, the Information Center police officers and the police data specialists have found it increasingly difficult to handle the growing volume of reports taken over the telephone. In addition to telephone calls, Information Center police officers are required to assist citizens who come into the lobby to report incidents and provide security for the Police Administration Building. The SJPD determined that the Information Center is able to answer only 47 percent to 53 percent of the calls it receives. The other calls are lost, meaning that the callers hung up before they were able to talk to anyone at the SJPD. These lost calls have generated a number of citizen complaints.

Proposed Transfer Of The Telephone
Report-Writing Function To The Communications Center

From December 1, 1993, to March 10, 1994, the Bureau of Technical Services conducted a pilot project in which Communications Center personnel took over the telephone report-writing function from the Information Center for several hours each day. As a result of this pilot project, the Bureau of Technical Services determined that the number of lost calls during the day decreased significantly. Given the success of the pilot project, the Bureau of Technical Services prepared a

[11] The Information Center is within the Operations Support Services Division of the Bureau of Technical Services.

draft report proposing to transfer telephone report writing from the Information Center to the Communications Center.[12] Under the March 1994 draft proposal, telephone report writing would change from a manual to an automated process. In addition, a new section to be named the Telephone Report Automation Center (TRAC)[13] would handle telephone report writing.

In August 1994, the Budget Office authorized 9 PSD Is and one senior PSD to staff the TRAC function. These PSDs were hired in late 1994. The Division plans to implement the TRAC program in May 1995.

We prepared a staffing pattern for the current and the TRAC program based on the current staffing pattern for the 124 authorized positions and compared it to the call volume-driven staffing demand we calculated for the Center. We also subtracted the 22.6 percent long- and short-term absence factors (see page 23) when we prepared a 5-shift staffing pattern for 124 PSDs. Graph 5 shows that the Division could not staff the Center and meet the call volume-driven staffing demand without incurring significant overtime in spite of the fact that there will be fifteen times during the week that significant overstaffing will occur.

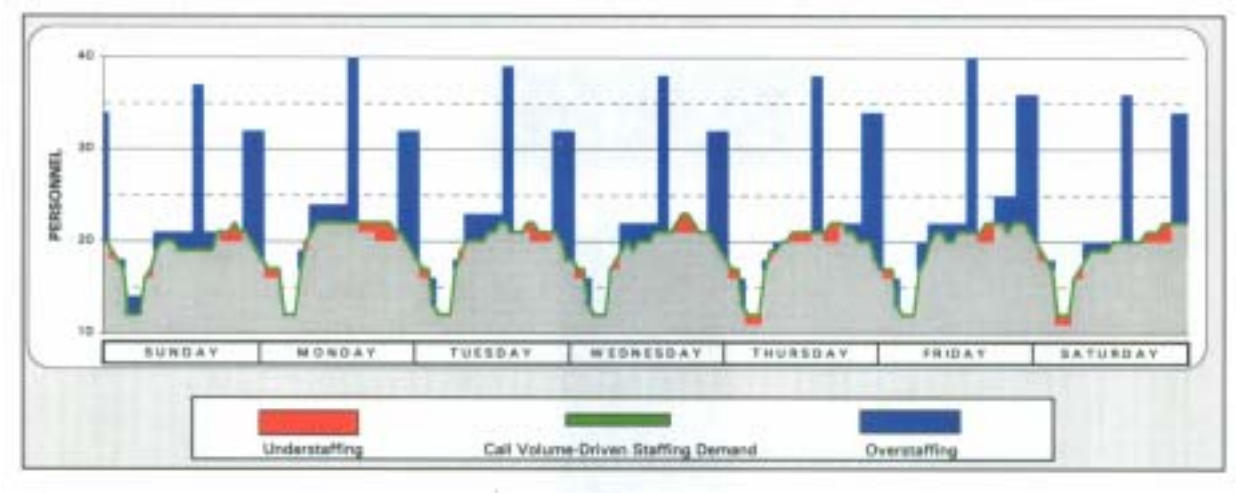
---

[12] The original design of the Communications Center included workstations for report taking. These workstations had been vacant since the completion of the building in anticipation of eventually assuming the report-writing function.

[13] The proposed TRAC will use a call-screening process to increase the number of calls handled. The Division estimates that only one-third of the calls need reports. During the two-week pilot program conducted in March 1994 at the Communications Center with PSDs answering calls, the percentage of calls answered increased to the point where only 3 percent of the calls were lost on one of the days during the two-week pilot period.

GRAPH 5

ONE WEEK'S CURRENT STAFFING PATTERN* WITH TRAC COMPARED TO CALL VOLUME-DRIVEN STAFFING DEMAND WITH TRAC



* Staff shown reflects 124 authorized positions less 22.6 percent allowance for long-term leaves and training and short-term absences.

The call volume-driven staffing demand shown in Graph 5 is based on the TRAC program operating 7 days a week 24 hours a day. We determined TRAC demand at this time because eventually the Division plans to implement TRAC operating daily 24 hours a day. The Division plans to initially staff TRAC from 9 a.m. to 6:30 p.m. Monday through Friday and from 9 p.m. to midnight daily utilizing the 9:30 p.m. to 1 a.m. overlap staff. However, the 1993 Information Center workload reports indicated that the peak workload times were from 7 a.m. to 8 p.m. during nine months and from 7 a.m. to 4 p.m. or 8 a.m. to 5 p.m. and from 6 p.m. to 10 p.m. for the other three months. Therefore, our calculated TRAC demand provides TRAC service during peak times, whereas the Division's planned deployment of staff does not.

Absent Changes To Its Current 5-Shift Pattern And 45-Minute Briefing Periods, The Division Will Need A Total Of 136 PSDs In Order To Function At Its Own Minimum Staffing Level

As noted earlier in this report, the Budget Office authorized 9 additional PSD Is in August 1994 to staff the TRAC program. Adding the additional staff to the existing 115 PSD Is and IIs results in a total of 124 PSD Is and IIs. As noted on page 23, during the course of this audit the Budget and City Auditor's Offices concluded that PSDs are not available to perform call handling or dispatch tasks for 22.6 percent of the available 2,080 annual hours. This resulted in the Budget Office revising the Center's PSD I and II requirements from 124 PSDs to 136 PSDs. The Budget Office qualified its revision by stating that it would consider funding the additional 12 positions only to improve the Center's 7-digit emergency and non-emergency service given the General Fund's financial condition and General Fund budget priorities. Thus, absent changes to its current 5-shift pattern and 45-minute briefing periods, the Division will need a total of 136 PSDs in order to function at its own minimum staffing level after assuming TRAC responsibilities.

Computer Optimization

Part of our review of the Division's staffing was to use a computer optimization model to optimize the scheduling of PSDs at the Center and to compare those results to current staffing. To construct a computer optimization model for scheduling PSDs in the Center, we used the computer program Microsoft Excel Solver. Solver uses numeric methods for determining optimal allocation of scarce resources--in this case, personnel resources. This process is also known as linear programming. Appendix C describes the computer

optimization model in more detail. Appendix C also describes the historical workload data.

Staffing Assumptions

To determine the staffing requirement based on call volume, we made some assumptions regarding the amount of time required to handle a call. Emergency call-taking talk time averages about two minutes. We estimated call-takers could handle either one emergency or one non-emergency call every four minutes. The city of Phoenix, Arizona's, communications center also uses a criterion of one call every four minutes. While we were not able to project the effect of calls received simultaneously in the model, we assumed that secondary tier call-takers, who are designated to answer non-emergency calls, could handle simultaneously received emergency calls. Furthermore, in addition to staffing based on the emergency call volume, we added one call-back position 24 hours a day for those emergency callers who hang up before their calls are answered. Finally, the model allows 30 minutes for dispatcher briefings at the beginning of each shift.

We assumed a minimum of 6 call-takers to answer emergency and non-emergency calls and perform call-backs during any hour of the day. The minimum requirement becomes significant during the dawn hours of the morning when call volume averages are low. The Division operations manager stated that considering the size of the city of San Jose, this is the responsible level of staffing for an acceptable standard of service level.

Reports from the TRAC pilot program show an average of 111 seconds for call screening and 577 seconds for report writing. We estimated that report writing would require 2 minutes (120 seconds) for a call requiring screening only and 12

minutes (720 seconds) for a call requiring both the initial call screening and report writing.

Radio, Service, And Relief Workload Constraints

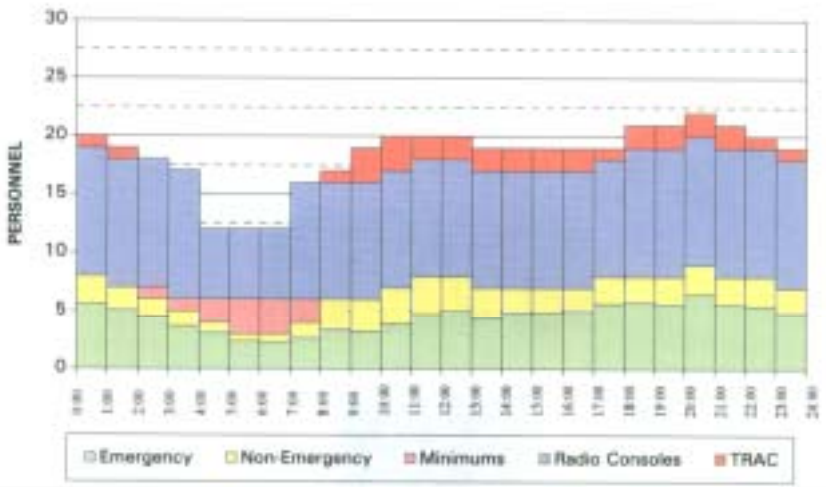
We reviewed the level of staffing for the radio, service, and relief positions with the Division's operations manager. These positions are generally fixed hourly requirements with 6 positions staffed 24 hours a day, 4 positions staffed 20 to 21 hours a day, and one position staffed 10 hours a day.

Hourly Call Volume-Driven Staffing Demand

We refer to the number of PSDs needed to handle the call-taking, radio, service, and relief workload on an hourly basis as the call volume-driven staffing demand. The call volume-driven staffing demand we calculated is shown in Graphs 6 through 12 on the following pages.

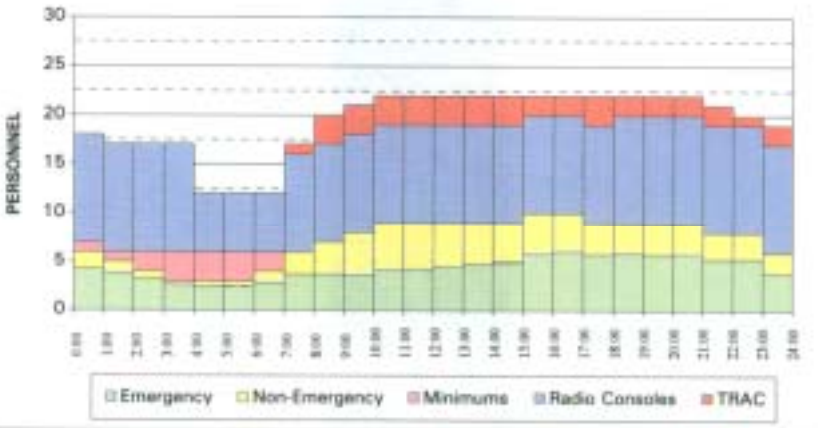
GRAPH 6

SUNDAY'S HOURLY CALL VOLUME-DRIVEN STAFFING DEMAND BY WORKLOAD CATEGORY



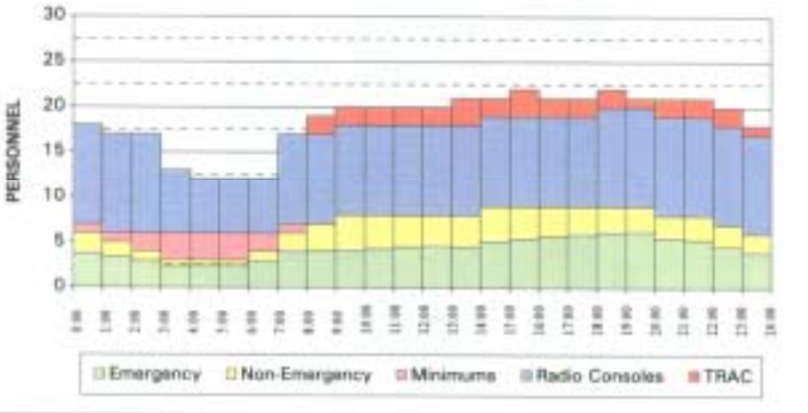
GRAPH 7

MONDAY'S HOURLY CALL VOLUME-DRIVEN STAFFING DEMAND BY WORKLOAD CATEGORY



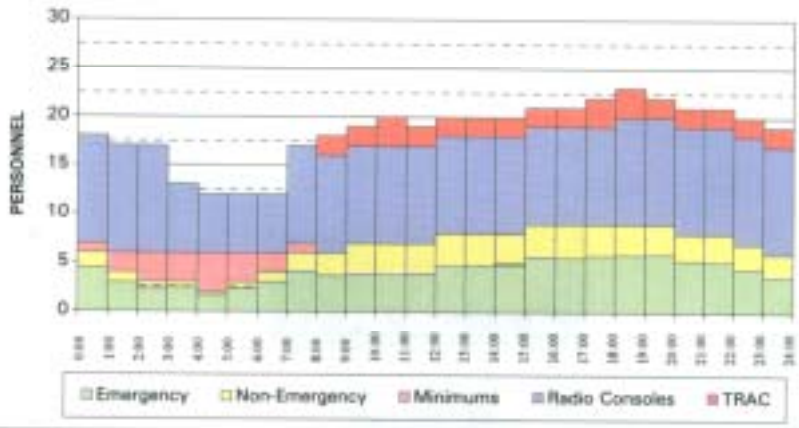
GRAPH 8

TUESDAY'S HOURLY CALL VOLUME-DRIVEN STAFFING DEMAND BY WORKLOAD CATEGORY



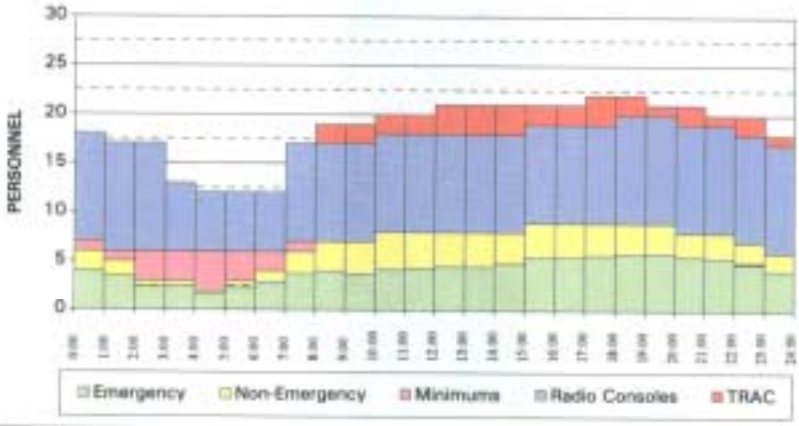
GRAPH 9

WEDNESDAY'S HOURLY CALL VOLUME-DRIVEN STAFFING DEMAND BY WORKLOAD CATEGORY



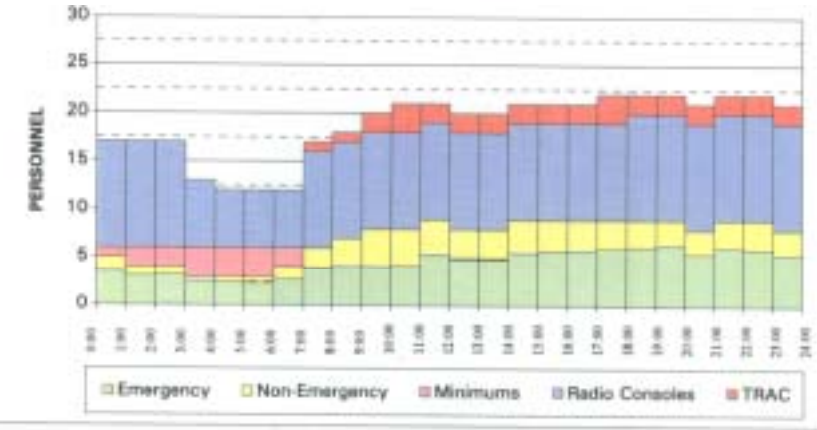
GRAPH 10

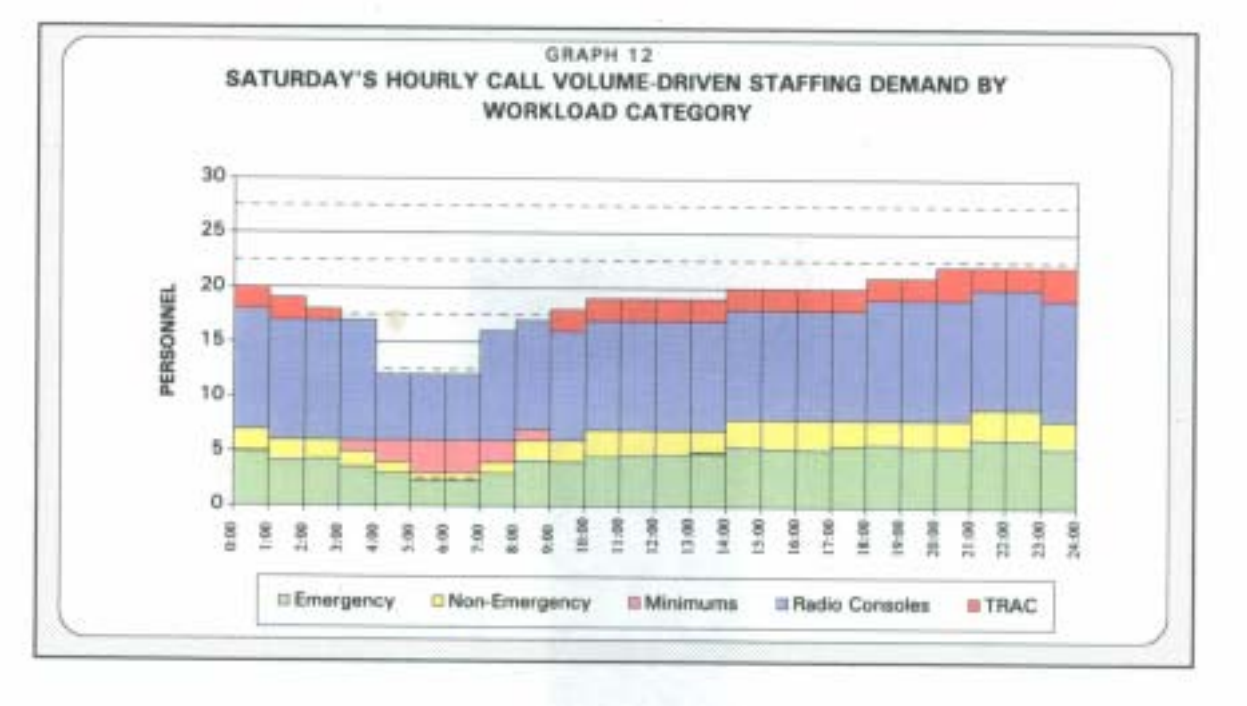
THURSDAY'S HOURLY CALL VOLUME-DRIVEN STAFFING DEMAND BY WORKLOAD CATEGORY



GRAPH 11

FRIDAY'S HOURLY CALL VOLUME-DRIVEN STAFFING DEMAND BY WORKLOAD CATEGORY



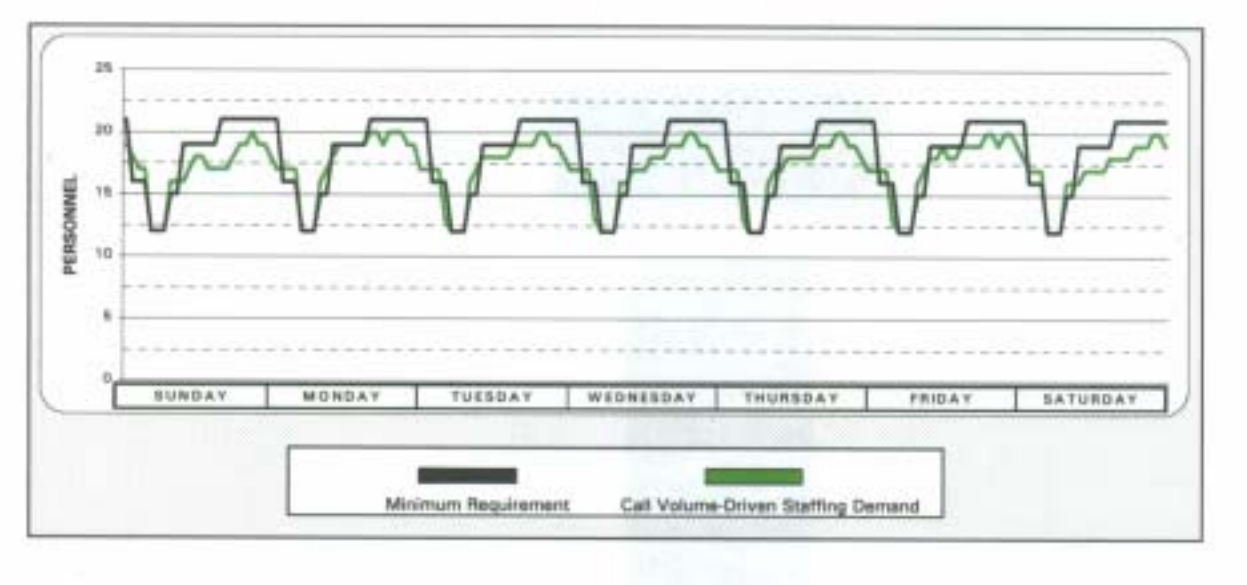


Comparison Of Calculated Call Volume-Driven Staffing Demand
Without TRAC To the Center's Minimum Staffing Requirement

We compared the call volume-driven staffing demand without TRAC we calculated to the Center's minimum staffing requirement. (See page 27 for a description of the Center's minimum staffing requirement.) We found that the call volume-driven staffing demand we calculated is very similar to the Center's own minimum staffing requirement as is shown below in Graph 13.

GRAPH 13

COMPARISON OF CALL VOLUME-DRIVEN STAFFING DEMAND
WITHOUT TRAC TO THE CENTER'S MINIMUM STAFFING REQUIREMENT



In our opinion, the similarities shown in Graph 13 demonstrate that basing staffing on our calculated call volume-driven staffing demand will not in any way jeopardize public safety.

The Results Of Our Optimization Were That The Division Can (1) Eliminate 10 PSD Positions While At The Same Time Significantly Improve Its Ability To Function At Or Above Its Minimum Staffing Level, (2) Avoid Periods Of Overstaffing, And (3) Save The City $860,000 Per Year In Regular Personnel, Overtime, And Compensatory Time Costs

Current Personnel Costs

The Division's 1992-93 budget for salaries and benefits, including supervision and management, was $8,328,374. We estimate that salaries and benefits, including bilingual, shift differential, and holiday pay, for PSD Is and IIs on average total approximately $56,000 per PSD. This amounts to $6,440,000 for

the current complement of 115 PSD Is and IIs. Our estimate is based on actual salaries and estimated benefits paid during two pay periods in April 1994.

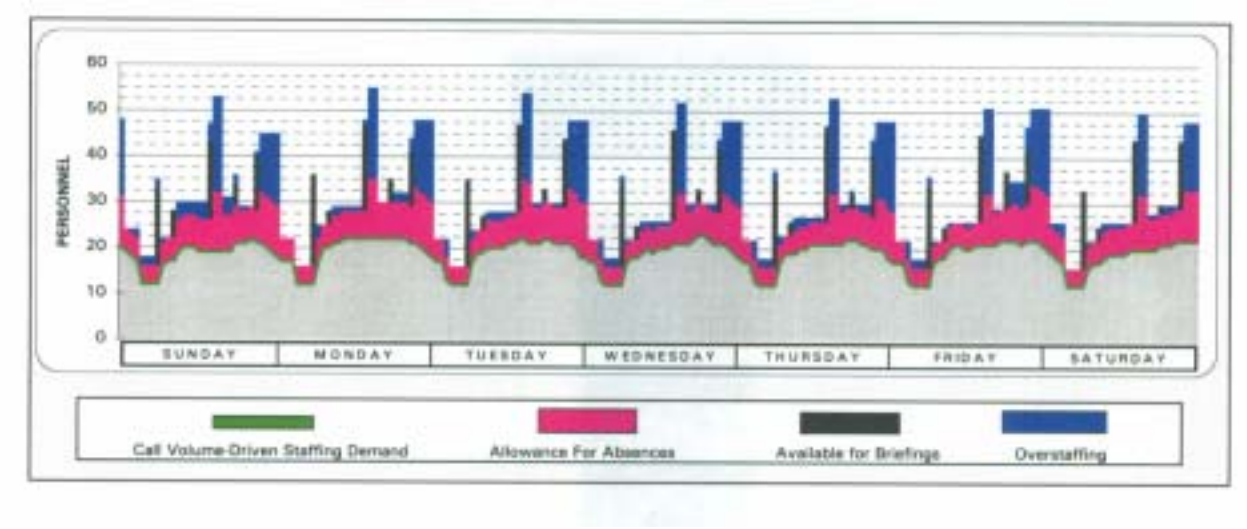
A 10-Shift Pattern Would Save $860,000 Per Year
Without Reducing The Center's Responsiveness To Citizen Calls

We used the computer optimization model to optimize the transfer of telephone report writing using the Center's current 5-shift pattern and also a 10-shift pattern. We estimate that optimizing on a 10-shift pattern would save the Division as much as $560,000 per year in regular personnel costs and $300,000 in overtime and compensatory time costs when compared to the 124 authorized PSD positions.

The current 5-shift optimized model shown in Graph 14 results in a base of 102 positions. Using a 22.6 percent short-term and long-term absence factor on the model results in a staff requirement of 132 positions. Graph 14 shows the optimized deployment of these 132 positions.

GRAPH 14

ONE WEEK'S COMPUTER-OPTIMIZED 5-SHIFT STAFFING PATTERN
WITH TRAC COMPARED TO CALL VOLUME-DRIVEN STAFFING DEMAND

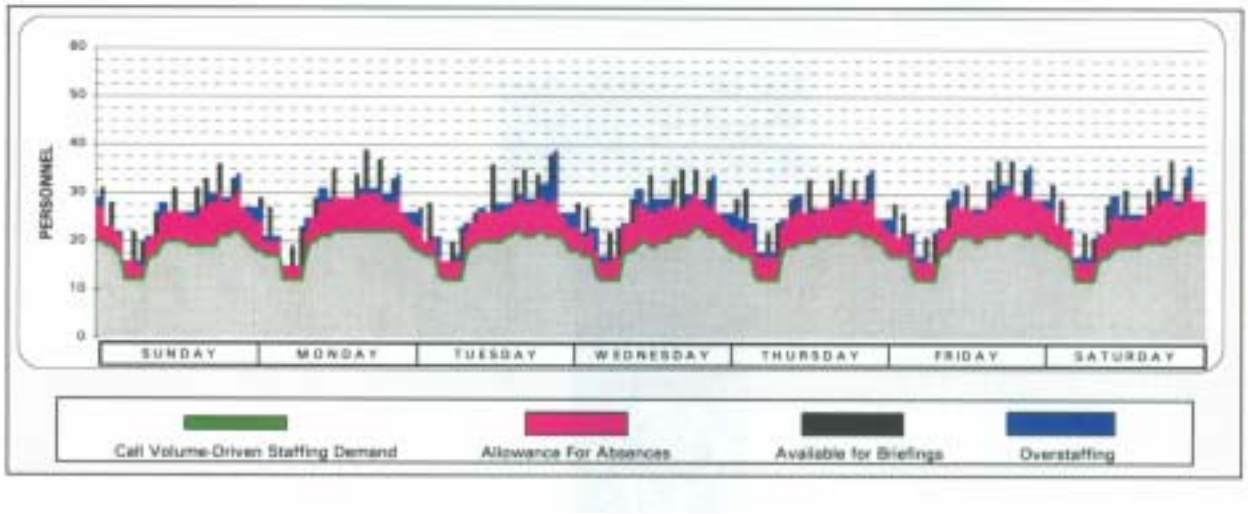


As is shown in Graph 14, by optimizing on a 5-shift pattern, we have eliminated all staff shortages and minimized to the extent possible the overstaffing that is inherent in a 5-shift pattern.

Graph 15 shows that our optimized 10-shift pattern, including staffing to cover long- and short-term absences and training will require only 114 PSDs. These 114 PSDs consist of 88 base positions plus 26 positions to cover the 22.6 percent short- and long-term absence factor. Appendix F shows the actual number of PSDs the call volume-driven staffing demand requires for each shift under the 10-shift pattern.

GRAPH 15

ONE WEEK'S COMPUTER-OPTIMIZED 10-SHIFT STAFFING PATTERN
WITH TRAC COMPARED TO CALL VOLUME-DRIVEN STAFFING DEMAND



Graph 15 shows the optimized use of 88 base PSDs and the additional 26 PSDs required to satisfy the 22.6 percent allowance for absences, long-term leaves, and training.[14] The hourly number of PSDs is shown in Appendix F. Appendix G shows the schedule of PSDs.

The significance of Graph 15 is that it shows that an optimized 10-shift, 114-PSD staffing pattern provides the same protection against understaffing and far less overstaffing than an optimized 5-shift, 132-PSD staffing pattern (Graph 14). Further, based on estimated personnel costs of $56,000 per PSD per year, an optimized 10-shift, 114-PSD staffing pattern requires 10 fewer PSDs than the Center's current 124-PSD staffing pattern. Thus, an optimized 10-shift pattern would save the City $560,000 in regular personnel costs and $300,000 per year in

[14] Because the PSDs on long-term leave would not be scheduled at the semi-annual shift-bidding process, the number of PSDs available would be less than those shown in Graph 15.

overtime and compensatory time costs per year. This $300,000 savings results from an optimized 10-shift staffing pattern providing minimum staffing at all times while the current 5-shift pattern does not.

Summary Of Computer Optimization Alternatives With TRAC

Using the computer optimization model, we developed nine other shift patterns with varying costs or cost savings. Table 10 on the following page summarizes the results of our computer optimization with TRAC. In addition to the current 5-shift configuration, we also ran alternative shift configurations. We ran a 5-shift configuration with starting times different from the current starting times. We also ran alternative eight and ten shifts. We ran three models where the latest starting time was 12:30 a.m. The summary shows the number of shifts and starting times used in each alternative and the resulting required number of positions. We also show the number of sub-shifts. The summary also shows the difference in required positions and the estimated cost or cost savings associated with the difference in the number of positions with respect to the different alternatives.

As shown in the summary, the 10-shift pattern shows the lowest cost. The Division objects to starting times later than 10 p.m. Therefore, we ran the computer model with the latest starting time at 10 p.m. That alternative requires 13 more PSDs than the optimized 10-shift pattern with no restrictions on starting times. For comparison purposes, we also ran alternatives which begin at 11 p.m. and 12:30 a.m. The 11 p.m. and the 12:30 a.m. alternatives resulted in requiring 11 and 9 more PSDs, respectively, than the optimized 10-shift pattern with no restrictions on starting times.

TABLE 10
SUMMARY OF COMPUTER OPTIMIZATION RESULTS WITH TRAC

	COMPARISON BASE Daily 13-Hour TRAC Service***	ALTERNATIVE OPTIMIZED SHIFTS Daily 24-Hour TRAC Service				RESTRICTING STARTING TIME Daily 24-Hour TRAC Service		
	CURRENT 5 SHIFTS (not optimized)	CURRENT 5 SHIFTS	5 SHIFTS	8 SHIFTS	10 SHIFTS	10 SHIFTS**** With Latest Starting Time At 10:00 PM	6 SHIFTS**** With Latest Starting Time At 11:00 PM	7 SHIFTS**** With Latest Starting Time At 12:30 AM
Starting Times	6:15 AM 8:30 AM 3:00 PM 6:00 PM 9:00 PM	6:30 AM* 8:30 AM 3:00 PM 6:00 PM 9:00 PM	1:30 AM 6:30 AM 11:00 AM 4:00 PM 6:00 PM	1:30 AM 5:30 AM 6:30 AM 8:30 AM 11:00 AM 3:00 PM 4:00 PM 8:00 PM	12:30 AM 1:30 AM 5:30 AM 6:30 AM 8:30 AM 11:00 AM 3:00 PM 4:00 PM 6:00 PM 8:00 PM	6:00 AM 6:30 AM 7:30 AM 8:30 AM 10:00 AM 1:00 PM 3:30 PM 5:00 PM 6:00 PM 10:00 PM	6:30 AM 8:30 AM 10:00 AM 4:00 PM 6:00 PM 11:00 PM	6:30 AM 8:30 AM 10:00 AM 1:30 PM 4:00 PM 6:00 PM 12:30 AM
	35 Sub-Shifts	25 Sub-Shifts	26 Sub-Shifts	37 Sub-Shifts	43 Sub-Shifts	35 Sub-Shifts	28 Sub-Shifts	28 Sub-Shifts
PSD Is & IIs With 22.6%**	124 Positions	132 Positions	123 Positions	117 Positions	114 Positions	127 Positions	125 Positions	123 Positions
Personnel Change From Comparison Base	0	(8)	1	7	10	(3)	(1)	1
Estimated Savings / (Cost)	$0	($448,000)	$56,000	$392,000	$560,000	(168,000)	(56,000)	$56,000
Estimated Overtime and Compensatory Time Savings	$0	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000	$300,000
Total Estimated Savings / (Cost)	$0	($148,000)	$356,000	$692,000	$860,000	$132,000	$244,000	$356,000

FOOTNOTES:

*Starting time changed from 6:15 a.m. to 6:30 a.m. to adapt to model.

**The number of optimized positions is comprised of an optimized base staffing with a 22.6 percent short- and long-term absence rate. The division currently has 124 authorized positions.

***Division's planned TRAC hours are from 9 a.m. to 6:30 p.m. and from 9:30 p.m. to 1 a.m. daily.

****The amount of shifts does not represent a constraint for optimizing as does the restricted starting time; these shifts are the least amount obtainable without diminishing the optimized outcome.

For comparison purposes, we ran the optimization models using the daily 13-hour TRAC service the Division plans to operate. Table 11 on the following page summarizes the results of the computer optimization. As shown on the summary, optimizing results in 7 more positions than the comparison base of 124 positions. The reason optimizing results in 7 more positions is that the optimized alternative provides adequate PSD coverage at all times whereas the current 5-shift pattern does not.

TABLE 11

SUMMARY OF COMPUTER OPTIMIZATION RESULTS
WITH 13-HOUR TRAC

	COMPARISON BASE DAILY 13-HOUR TRAC SERVICE*** CURRENT 5 SHIFTS (not optimized)	DAILY 13-HOUR TRAC SERVICE*** CURRENT 5 SHIFTS (optimized)
Starting Times	6:15 AM 8:30 AM 3:00 PM 6:00 PM 9:00 P.M.	6:30 AM* 8:30 AM 3:00 PM 6:00 PM 9:00 P.M.
PSD Is & IIs With 22.6%**	35 Sub-Shifts	25 Sub-Shifts
Personnel Change From	124 Positions	131 Positions
Comparison Based	0	(7)
Estimated Savings	$0	($392,000)
Estimated Overtime and Compensatory Time Savings	$0	$300,000
Total Estimated Savings/(Cost)	$0	($92,000)

Note: The comparison base assumes 30 to 75 minutes available for briefing. All models assume 30 minutes for briefing.

* Starting time changed from 6:15 a.m. to 6:30 a.m. to adapt to model.
** The number of optimized positions is comprised of an optimized base staffing with a 22.6 percent short- and long-term absence rate. The Division currently has 124 authorized positions.
*** Division's planned TRAC hours are from 9 a.m. to 6:30 p.m. and from 9:30 p.m. to 1 a.m. daily.

With TRAC For A 5-Day, 8-Hour Workweek

For comparison purposes, we ran the optimization models using 5-day, 8-hour workweeks. Table 12 on the following page summarizes the results of the computer optimization with TRAC using 5-day, 8-hour workweeks. We ran the models with and without half-hour briefings and in combination with a 4-day, 10-hour workweek. The 5-day, 8-hour workweek without briefings and the combination 5-day, 8-hour workweek without briefings and 4-day, 10-hour workweek with briefings both resulted in a need for 114 PSD positions. This is the same number of positions required by the 4-day, 10-hour workweek, 10-shift pattern shown in Table 10; however, the latest starting times are 10 p.m. and 11 p.m. The drawback to these alternatives is lack of briefing times for the 5-day, 8-hour shifts. We ran the 5-day, 8-hour workweek with briefings, and that alternative resulted in a need for 123 PSDs. Thus, adding briefings to the 5-day, 8-hour schedule will cost the City an additional $504,000 per year (the difference between 123 PSDs and 114 PSDs).

TABLE 12
SUMMARY OF COMPUTER OPTIMIZATION RESULTS
WITH 5/8 SHIFTS AND COMBINATION 4/10 & 5/8 SHIFTS

	COMPARISON BASE Daily 13-Hour TRAC Service***	ALTERNATIVE OPTIMIZED SHIFTS Daily 24-Hour TRAC Service			
	CURRENT 5 SHIFTS (not optimized)	CURRENT 5 SHIFTS	8 SHIFTS 5-DAY / 8-HOUR SHIFT WITHOUT BRIEFINGS	9 SHIFTS - COMBO 5-DAY / 8-HOUR SHIFT WITHOUT BRIEFINGS 4-DAY / 10-HOUR SHIFT WITH BRIEFINGS	8 SHIFTS 5-DAY / 8-HOUR SHIFT WITH BRIEFINGS
Starting Times	6:15 AM 8:30 AM 3:00 PM 6:00 PM 9:00 PM	6:30 AM* 8:30 AM 3:00 PM 6:00 PM 9:00 PM	5:00 AM 6:00 AM 7:00 AM 1:00 PM 2:00 PM 3:00 PM 9:00 PM 10:00 PM	**48% ON 5/8 SHIFT** 6:00 AM 2:00 PM 10:00 PM **52% ON 4/10 SHIFT** 6:30 AM 8:30 AM 10:00 AM 4:00 PM 6:00 PM 11:00 PM	5:00 AM 6:30 AM 8:30 AM 12:30 PM 2:00 PM 4:00 PM 8:00 PM 9:30 PM
	35 Sub-Shifts	**25 Sub-Shifts**	**26 Sub-Shifts**	**35 Sub-Shifts**	**39 Sub-Shifts**
PSD Is & IIs With 22.6%**	124 Positions	132 Positions	114 Positions	114 Positions	123 Positions
Personnel Change From Comparison Base	0	(8)	10	10	1
Estimated Savings / (Cost)	$0	($448,000)	$560,000	$560,000	$56,000
Estimated Overtime and Compensatory Time Savings	$0	$300,000	$300,000	$300,000	$300,000
Total Estimated Savings / (Cost)	$0	($148,000)	$860,000	$860,000	$356,000

FOOTNOTES:

*Starting time changed from 6:15 a.m. to 6:30 a.m. to adapt to model.
** The number of optimized positions is comprised of an optimized base staffing with a 22.6 percent short- and-long term absence rate. The division currently has 124 authorized positions.
***Division's planned TRAC hours are from 9 a.m. to 6:30 p.m. and from 9:30 p.m. to 1 a.m. daily.

Based on our computer optimization of the SJPD's staffing at the Center, we conclude that by using a 10-shift pattern for PSDs, the Division will (1) need only 114 PSDs while at the same time significantly improve its ability to function at or above its minimum staffing level, (2) avoid periods of overstaffing, and (3) save the City as much as $860,000 per year in regular personnel, overtime, and compensatory time costs.

The Bureau Of Field Operations Is Proposing The Addition Of A Fourth Watch

The BFO also uses the 4-day, 10-hour workweek and currently has three watches. The BFO is proposing the addition of a fourth watch in order to improve staffing deployment by increasing staffing during periods of understaffing and decreasing staffing during periods of overstaffing. BFO management wanted to implement the additional fourth watch at the March 1995 shift change but could not because, according to the Division, BFO does not have enough field officers. Furthermore, BFO reports it is now looking at a September 1995 implementation. In our opinion, this workload-driven need for an additional BFO watch evidences the need for a change in the Center shift times.

Division Opposition To Computer Optimization Models

- Allowance For Public Safety Dispatchers' Briefings

In our optimization models, we allocated 30 minutes for PSD daily briefings. The Division's management objects to a 30-minutes briefing allowance and feels it will not be workable.

The Center's PSDs attend the BFO's field officer briefings prior to the beginning of their shifts. BFO briefings begin at 6:30 a.m., 3 p.m., and 9 p.m. and

last from 10 to 40 minutes. At the briefings, PSDs are alerted to potential events or activities they may encounter during their shifts. This may help PSDs to dispatch the correct number of units to an incident. Information received at briefings may also help PSDs to determine call priority. After the field officer briefing, the supervising PSD may hold a 15-minute briefing for the PSDs only.[15] Therefore, the Division allocates at least 45 minutes for daily briefings for the 6:15 a.m., 3 p.m., and 9 p.m. shifts. In addition, the two Center overlay shifts, which begin at 8:30 a.m. and 6 p.m., also have PSD-only briefings. Senior PSDs brief the PSD Is and IIs on these two shifts. The senior PSD briefs the PSD Is and IIs using information from his or her BFO briefing notes and on administrative items pertinent to PSDs. The briefings for these two overlay shifts last from 10 to 25 minutes.

In our opinion, allocating only 30 minutes for daily PSD briefings instead of 45 minutes is workable and responsible for the following reasons:

- The PSD-only briefings are inherently administrative in nature and can usually wait until the following day. BFO briefings, on the other hand, involve crime or emergency information which must be heard on the same day to be useful. However, BFO briefings include officer roll call and other BFO administrative items for which PSDs need not be present.
- PSDs can retrieve All Points Bulletins, which are an important part of the information disseminated at BFO briefings, from the CAD systems at their workstations.

[15] The Division's management reports that 15 minutes is not enough for the Watch I PSD briefing which is held at 6:15 a.m. prior to the BFO briefing. Therefore, twice a week Watch I has a debriefing that only PSDs attend when the swing shift returns from briefing during the 3 p.m. to 4:15 p.m. overlap hour.

- Of the five comparable communications centers we surveyed, only one, San Diego, performs briefings. (See Appendix H for survey results.) The San Diego Communications Center allows 20 minutes for briefings which are not held in conjunction with the patrol officers;

- We estimate that the additional 15 minutes in briefings requires approximately three additional PSDs.[16] Based on an estimated personnel cost of $56,000 per PSD, the extra 15 minutes allocated for briefings amounts to $168,000 annually; and

- Supervising PSDs and/or senior PSDs can attend BFO briefings or obtain pertinent briefing information from the BFO and subsequently brief the PSDs. This is the current procedure for the two PSD shifts which begin at 8:30 a.m. and 6 p.m.

In our opinion, relations between PSDs and patrol officers would not deteriorate if PSDs did not attend BFO briefings. However, if the Division feels that PSD I and II involvement in BFO briefings is essential to maintaining good relations with field officers, then PSDs attending BFO briefings once or twice per shift week should be sufficient.

In our opinion, by limiting the briefing time to 30 minutes, dispatchers can continue to receive briefing information without impacting call-answering effectiveness.

[16] Our estimate is based on 115 PSDs attending briefings an extra 15 minutes a day, 4 days a week, which totals one hour a week. One hour times 115 PSDs equals 115 dispatcher hours or approximately three additional PSDs.

- Continuity Of Supervision

The Division's management is concerned about the possible deterioration of supervision when using more shifts. Management believes that the benefits of the current 5-shift PSD deployment pattern and 3-shift supervision deployment pattern provide coverage that allows most of the PSDs to have the same supervisor throughout their shifts (continuity of supervision) and allows all supervisors to attend weekly or biweekly meetings that are held on Wednesdays.

The Division's supervision staff includes 12 senior PSDs who supervise PSD Is and IIs and 6 supervising PSDs who supervise the senior PSDs. We compared the Center's senior PSD schedules to the current 5-shift PSD I and II schedules, including TRAC, and to the 10-shift PSD schedule shown in Table 10. Additionally, we optimized senior PSD schedules and compared this outcome to the 10-shift PSD schedule. Table 13 shows the continuity of supervision for PSDs and the senior PSD workload.

TABLE 13

OVERALL CONTINUITY OF SUPERVISION AND SENIOR PSD WORKLOAD

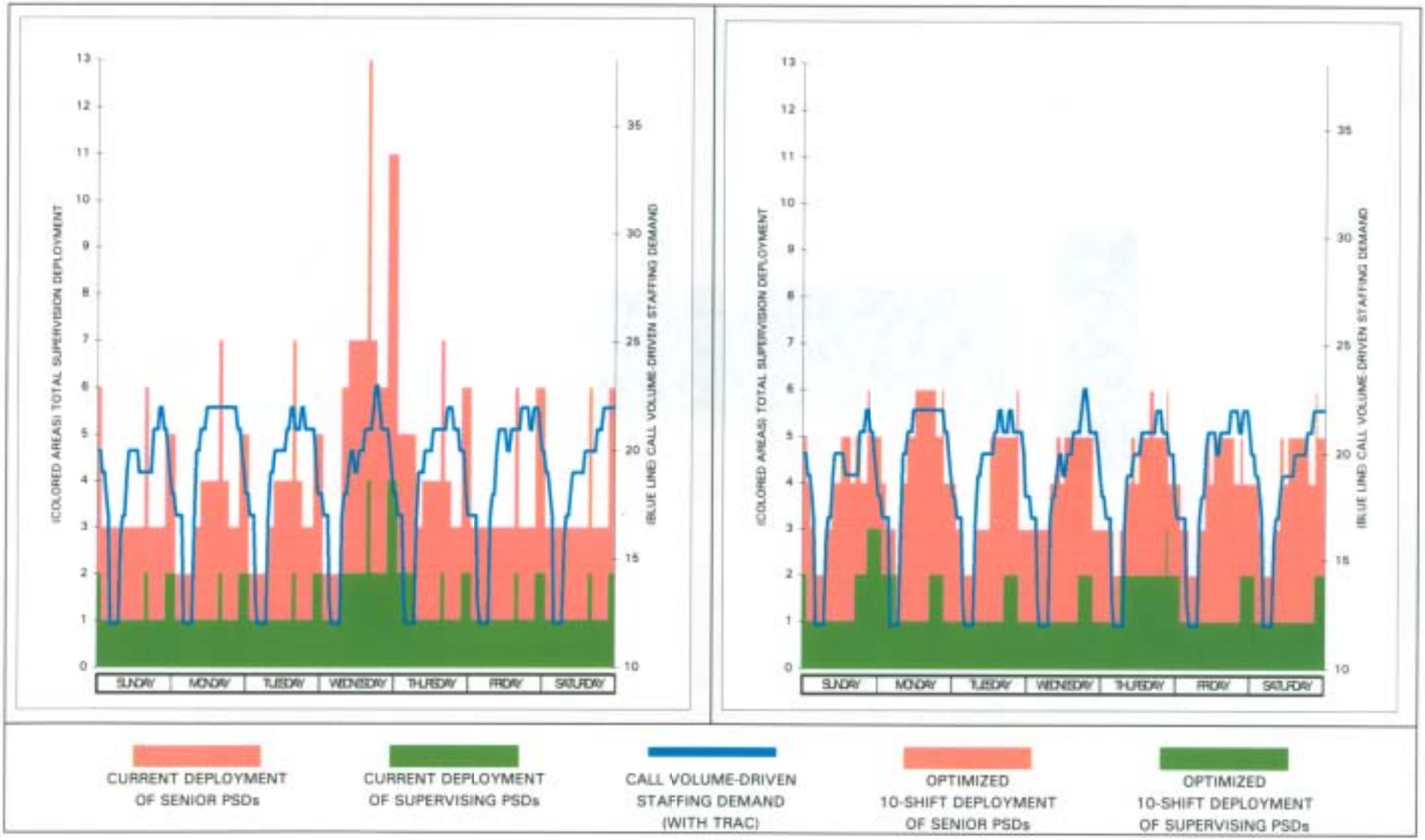
	Measured Supervision Levels		
	Communications Center's Current Senior PSD Schedule To PSD I and II Schedule Including TRAC	**Communications Center's Senior PSD Schedule To Optimized 10-Shift PSD I And II Schedule**	**Optimized Senior PSD Schedule To Optimized 10-Shift PSD I And II Schedule**
Overall Continuity Of Supervision	74%	64%	81%
Average Workload For Seniors (PSDs To One Senior)	10.3 to 1	9.5 to 1	9.5 to 1
Workload Range (PSDs To One Senior)	8.9 to 15.4	7.9 to 12.3	7.40 to 12.6

Our analysis of supervision reveals that going from the current 5-shift deployment to the optimized 10-shift deployment does decrease the continuity of supervision from 74 percent to 64 percent. However, the ratio of PSDs to senior PSDs improves from the current deployment at 10.3 to 1 to an optimized deployment at 9.5 to 1. Further, the optimized 10-shift pattern provides a lower minimum and maximum number of PSDs to one senior PSD (7.9 and 12.3, respectively) than does the current 5-shift pattern (8.9 and 15.4). See Appendix I for charts detailing these statistics. Additionally, as shown in Graph 16, by optimizing supervision as well as the PSD Is and IIs the Division can realize a continuity of supervision that is superior to the continuity of supervision the current 5-shift staffing pattern affords.

GRAPH 16

CURRENT DEPLOYMENT OF 12 SENIOR PSDs AND 6 SUPERVISING PSDs TO CALL VOLUME-DRIVEN STAFFING DEMAND (WITH TRAC)

OPTIMIZED 10-SHIFT DEPLOYMENT OF 12 SENIOR PSDs AND 6 SUPERVISING PSDs TO CALL VOLUME-DRIVEN STAFFING DEMAND (WITH TRAC)



- Parking For The Proposed Shifts That Begin After 12 A.M.

The Division management opposes use of shifts that begin after 12 a.m. for safety reasons. We have identified an opportunity for secured parking at the surface lot between the patrol car garage and the TEC building. This opportunity for secured parking is subject to City Administration approval, funding for reconfiguration of the portion of the lot closest to the TEC building, and funding for a motorized security gate.

- Need To Meet And Confer With Municipal Employees Federation

According to the Office of Employee Relations and City Attorney's Office, they would advise that the Office of Employee Relations meet and confer with the Municipal Employees Federation prior to the Division changing the PSD schedules to those shown in this report that are significantly different from the current schedules. Furthermore, according to the City Attorney's Office, following the meet and confer process would not preclude the City from unilaterally changing the PSD schedules.

CONCLUSION

During the course of our audit of the San Jose Police Department's (SJPD) Communications Center (Center), average 911 call answering improved. Specifically, average 911 call answering improved from 11 seconds in June 1994 to 3 seconds in February 1995 because of the change to off-hook answering. Also, procedural changes lowered the number of calls taking over 60 seconds to answer from 771 calls in August 1994 to approximately 4 calls in February 1995. Our review also revealed that the average PSD on a current 5-shift pattern combined with a short- and long-term leave rate of 22.6 percent results in overstaffing during

periods of each day and understaffing during other periods of each day. The understaffing occurs in spite of PSDs earning over $300,000 per year in paid overtime or compensatory time off. Our review also found that the Communications Division (Division) did not meet one of its four primary emergency call-answering and dispatch objectives in 1991-92, 1992-93, or 1993-94. In addition, during June and August 1994, 15 percent and 21 percent, respectively, of those emergency callers whom PSDs deemed not to be in an emergency situation hung up after being put on hold. Further, during February 1995, 24 percent of those emergency callers whom PSDs deemed not to be in an emergency situation hung up after being put on hold, twice the percentage of calls lost in February 1994.

In May 1995, the Division will assume responsibility for non-emergency report-writing calls that the SJPD's Operations Support Services Division currently handles. The Division has proposed to the City Administration that it can assume this additional responsibility by adding 9 PSDs, for a total of 124 PSDs. However, our review indicates that unless the Division either adds 12 more PSDs or deploys its existing PSDs more efficiently, the conditions described for emergency callers whom police dispatchers deem not to be in an emergency situation will be perpetuated after May 1995 and the Division will continue to function below its own minimum staffing level. Finally, the City Auditor's Office used a computer model to optimize the scheduling of PSDs in the Center. The results of our optimization were that the Division can
(1) eliminate 10 PSD positions while at the same time significantly improve its ability to function at or above its minimum staffing level, (2) avoid periods of overstaffing, and (3) save the City $860,000 per year in regular personnel, overtime, and compensatory time costs. Accordingly, we recommend that the

SJPD and the City Administration use the information in this report to develop, and forward to the City Council for concurrence, a staffing proposal for the Center that is both responsive to the public's emergency calling needs and the least costly to the City.

RECOMMENDATION

We recommend that the San Jose Police Department's Communications Division and the City Manager's Office:

Recommendation #1:

Use the information in this report to develop, and forward to the City Council for concurrence, a staffing proposal for the Communications Center that is both responsive to the public's emergency calling needs and the least costly to the City. (Priority 2)

FINDING II

THE SAN JOSE POLICE DEPARTMENT'S COMMUNICATIONS DIVISION CAN IMPROVE ITS MANAGEMENT REPORTING

During our audit, we noted the San Jose Police Department's (SJPD) Communications Division's (Division) computer system does not generate information regarding the length of time it takes to answer 911 calls which are deemed to be non-emergency and transferred to a secondary tier call-taker. We also noted that the Division has inconsistently reported on its Communications Center (Center) call volume. Further, the Division does not report the maximum call-answering delays for answered or lost emergency and non-emergency dispatch calls. Finally, the Division is lacking an analyst position to assist in management reporting. In our opinion, the Division should generate information regarding the length of time it takes to answer non-emergency 911 calls, itemize the calls it receives by type of call, report on the maximum call-answering delays for answered and lost emergency and non-emergency dispatch calls, and include such information in its trimester program management reports. Accordingly, we recommend that the Division and the City Manager request funding for a senior analyst position for the Bureau of Technical Services during the mid-year 1995-96 budget review process.

The Division's Computer System Does Not Generate Information Regarding the Initial Call-Answering Time For Transferred Non-Emergency 911 Calls

During our audit, we noted the Division's computer system does not generate information regarding the length of time it takes to answer 911 and 7-digit emergency calls which are deemed to be non-emergency and transferred to a secondary tier call-taker. However, the Division's computer system does report

on the time it takes to answer a call after it is transferred to a secondary tier call-taker. During February 1995, calls transferred to the non-emergency call-takers represented about 20 percent of emergency calls for the month. Because emergency calls deemed to be non-emergency and transferred to a secondary tier call-taker represent a significant number of Center call volume, in our opinion, the computer system should capture and report both the initial call-answering time and the call-answering time after the call is transferred.

The Division Has Inconsistently Reported On Its Call Volume

Our review indicated that the Division has inconsistently reported on the City's emergency call volume in its program management reports. As a result, it is extremely difficult, if not impossible, to compare emergency call volume from year to year and to track Division performance as well as staffing requirements. Specifically, we noted the following deficiencies in the reporting of emergency call volume:

- Prior to 1992-93, the Division did not include incoming non-emergency call volume in its program management reports. After it added the incoming non-emergency calls, the Division did not note that these components of call volume were being newly reported as part of the overall call volume in the management reports.

- Prior to 1993-94, the Division did not include non-computer system outbound and inbound calls,[17] ringdowns,[18] and miscellaneous calls.[19] Beginning in 1993-94, the Division added these calls to its program management reports; however, the Division did not note that these were newly reported components of call volume. As a result, the Division's management reports would give a casual reader the impression that call volume dramatically increased by over 500,000 calls in 1993-94 when, in fact, it did not.

The Division Should Itemize The Calls It Receives By Type Of Call

The Division should itemize the calls it receives by type of call such as emergency, non-emergency, outbound, miscellaneous and ringdowns, and include such information in its program management reports. This is critical for the following reasons:

- It allows management to compare emergency call volume from year to year;
- It assists management in analyzing staffing requirements; and
- It will enable the Division to determine whether procedural and other program changes that the Division makes actually improve emergency call-answering performance.

Itemizing these call volume components will not require the Division to do additional work. Currently, the individual call volume components are combined

[17] Includes other jurisdictions' All Points Bulletins information, updates, and administrative calls regarding field officers.

[18] Ringdowns are interagency direct calls that do not require dialing, such as outbound calls to County Communications, CHP, other jurisdictions, Airport Police, tow truck service, animal control, sheriff warrants, and burglar alarm service.

[19] Miscellaneous calls include all other inbound and outbound calls.

in program management reports. Thus, the individual components of call volume are already known, just not reported. Finally, by upgrading its program management reports, the Division will be able to prepare more accurate reports and better assess staffing needs.

The Division Needs To Report
On Its Maximum Call-Answering Delays

The Division does not report on its program management reports the maximum call-answering delays for answered and lost emergency and non-emergency dispatch calls. As reported in Finding I, we noted improvements in call-answering performance after we informed Division management about excessive call-answering delays for answered and lost emergency calls. Further, the Center's supervisors now report to the Division's operations manager regarding emergency call-answering delays in excess of 60 seconds. In our opinion, including information regarding call-answering delays and lost calls on trimester program management reports to the Chief of Police would assist Division management in monitoring performance. We acknowledge that the Division does not have computer-generated information available on all non-emergency dispatch calls--only those which have been transferred from an emergency phone number.

The Division Needs Additional Management Assistance

In 1994, the Division's police captain position was frozen, thus reducing part of its management staff. The Bureau of Technical Services (Bureau) plans to request for mid-year 1995-96 a senior analyst position to assist in management planning and analysis both in the Bureau's Operations Support Services and Communications Divisions. In the draft budget request document, the Bureau indicates it is accountable for maintaining accurate records relating to the SJPD's

response to calls for service, arrest, and crime patterns. The Bureau also notes that the technology applied to both police records and emergency communications requires understanding the funding requirements and planning priorities of both systems. Finally, the Bureau states that its personnel processes require proactive planning and analysis. Both Finding I and II in this report demonstrate the complex personnel and technology analysis issues facing the Division. Thus, we recommend that the Division and the City Manager request funding for a senior analyst position in the Bureau of Technical Services during the mid-year 1995-96 budget review process.

CONCLUSION

The San Jose Police Department's Communications Division (Division) does not generate information regarding the length of time it takes to answer 911 calls which are deemed to be non-emergency and transferred to a secondary tier call-taker. Also, the Division has inconsistently reported on its Communications Center call volume. Further, the Division does not include in its program management reports information regarding the maximum call-answering delays for emergency and non-emergency dispatch calls. In our opinion, the Division should improve its management reporting and the Division and the City Manager should request funding for a senior analyst position for the Bureau of Technical Services during the mid-year 1995-96 budget review process.

RECOMMENDATIONS

We recommend that the San Jose Police Department's Communications Division:

Recommendation #2:

Program its computer system to generate call-answering times for those emergency calls deemed to be non-emergencies and transferred to a secondary tier call-taker. (Priority 3)

Recommendation #3:

Itemize on its program management reports the calls it receives by type of call such as emergency, non-emergency, and other calls. (Priority 3)

Recommendation #4:

Include in its program management reports computer-generated information regarding maximum call-answering delays and lost emergency and non-emergency calls. (Priority 3)

Recommendation #5:

Request funding for a senior analyst position in the Bureau of Technical Services during the mid-year 1995-96 budget review process. (Priority 3)

Recommendation Requiring Budget Action

Of the preceding recommendations, #5 cannot be implemented absent additional funding. Accordingly, the City Manager should request during the mid-year 1995-96 budget review process that the City Council appropriate an amount sufficient to implement recommendation #5.

Click On The Appropriate Box To View Item

Administrator's Response

Appendix A | Appendix B | Appendix C

Appendix D | Appendix E | Appendix F